

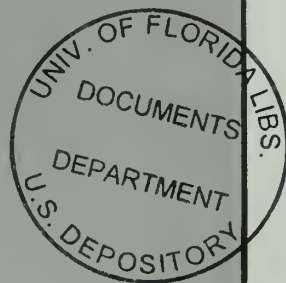
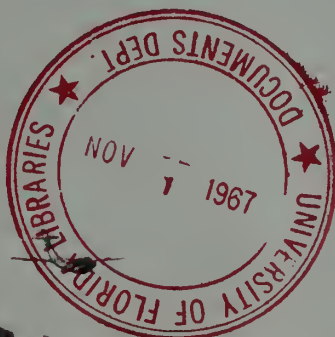
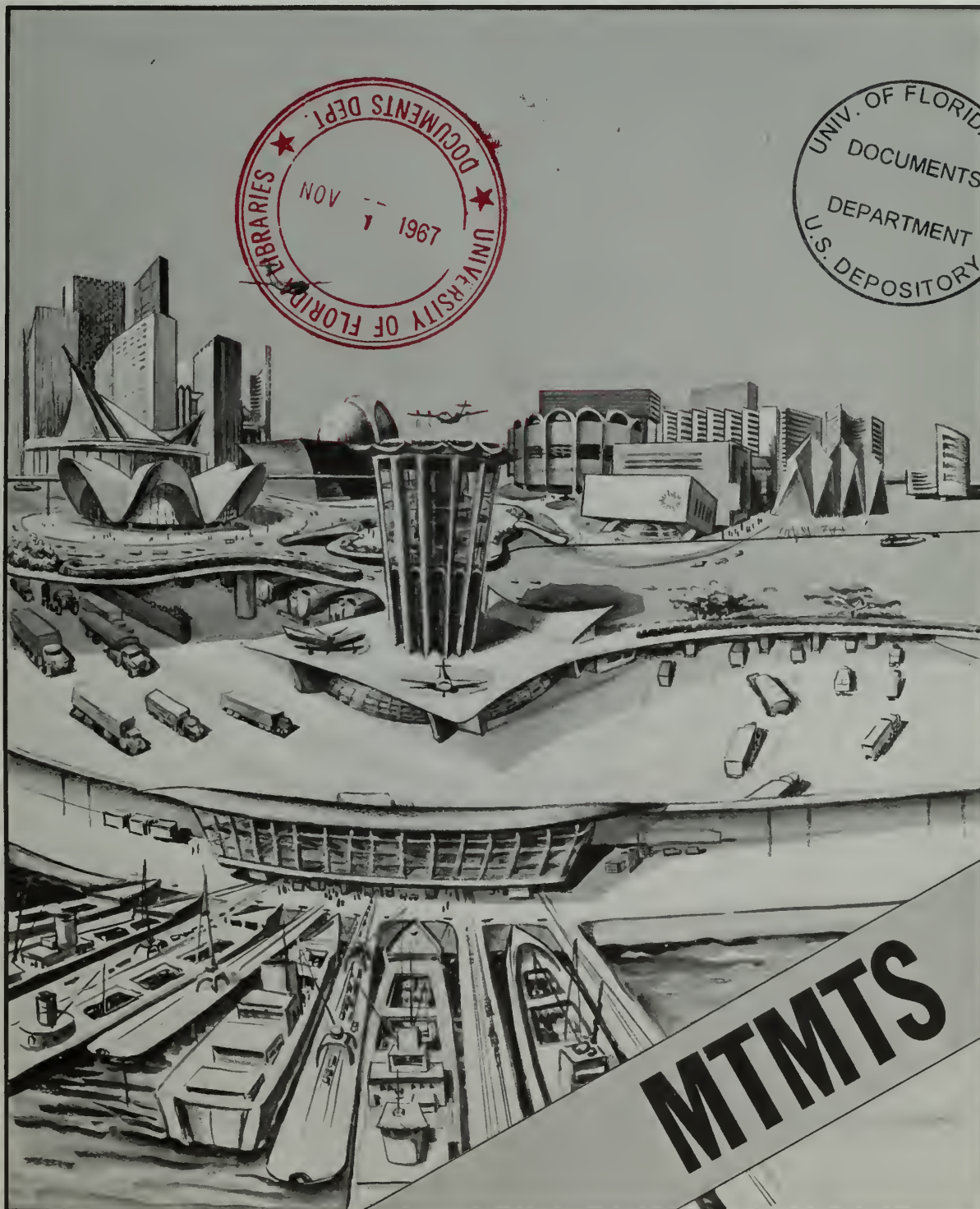
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DEFENSE INDUSTRY BULLETIN

VOL. 3 NO. 10

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MTMTS

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The *Defense Industry Bulletin* is published monthly by the Business & Labor Division, Directorate for Community Relations, Office of the Assistant Secretary of Defense (Public Affairs). Use of funds for printing this publication was approved by the Director of the Bureau of the Budget.

The purpose of the *Bulletin* is to serve as a means of communication between the Department of Defense (DOD) and its authorized agencies and defense contractors and other business interests. It will serve as a guide to industry concerning official policies, programs and projects, and will seek to stimulate thought by members of the defense-industry team in solving the problems that may arise in fulfilling the requirements of the DOD.

Material in the *Bulletin* is selected to supply pertinent unclassified data of interest to the business community. Suggestions from industry representatives for topics to be covered in future issues should be forwarded to the Business & Labor Division.

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Deputy Secretary of Defense

Hon. Phil G. Goulding
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(Public Affairs)

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Managing Defense Transportation Requirements

Major General John J. Lane, USA

When Mr. McNamara became the Secretary of Defense in 1961, he took on a job that has often been described as the second most difficult in the United States—second only to the Presidency itself.

The problems he faced were formidable. To begin with, he assumed the responsibility of managing the world's largest corporate structure, with an operating budget of \$70 billion or 10 percent of the Gross National Product. DOD's equipment, materiel and real estate holdings were estimated to be worth some \$150 billion and it employed nearly four million people.

Perhaps the most complex and challenging problem he faced was "matching" the nation's total transportation resources—both military and commercial—to DOD requirements. Judicious use of these resources, especially in the United States where nearly all military movements are generated, is vital to the world-wide mobility of the Armed Forces.

One of his basic objectives was to identify those areas of the total logistical operations where good management might produce desirable and lasting benefits. This encompassed such things as design and development, acquisition, storage, distribution, maintenance and, of course, transportation.

All of these factors play an important part in the establishment and maintenance of an efficient logistics system, essential to a nation that traditionally honors its international commitments. With troops stationed in 101 countries of the world, transportation, as a key element of logistics, assures that the vast DOD requirements are met.

When Secretary McNamara assumed his post, the DOD transportation team consisted of three transportation single-manager agencies. The Military Sea Transportation Service (MSTS), established in 1949, was providing all of the sea transportation for the movement of DOD cargo and personnel. The Military Airlift Command (MAC), formerly the Military Air Transport Service, was established in 1956 for the movement of cargo and personnel by air between the continental United States (CONUS) and overseas theaters, and within the overseas areas. CONUS traffic management for all DOD components was

performed by the Military Traffic Management Agency, established in 1956.

In 1961, this agency was renamed the Defense Traffic Management Service. The Single Manager Agency for Sealift reported to the Secretary of the Navy, and the Single Manager Agency for Airlift reported to the Secretary of the Air Force. The Single Manager Agency for CONUS Traffic Management initially reported to the Secretary of the Army, but was transferred to the Defense Supply Agency in 1961.

The weak link in the transportation system was the split operations of the common user ocean terminals, and the input control of cargo into the air and ocean terminals. It was fairly obvious that further consolidation of transportation services, within the United States, was necessary to achieve greater efficiency and economy. Several inter-Service studies had already reflected the need for a single agency to properly interface the inland traffic and the terminal functions.

Accordingly, in order that DOD might exercise more effective control and management over the total military transportation spectrum and properly interface with the nation's commercial resources, Secretary McNamara, in 1965, consolidated the traffic management functions of the Defense Traffic Management Service with the operation of common user ocean terminals and input control under a new single-manager agency, called the Military Traffic Management and Terminal Service (MTMTS), reporting to the Secretary of the Army.

MTMTS was created under a DOD charter which states: "The purpose



Maj. General John J. Lane, USA, is the commander of the Military Traffic Management and Terminal Service. He previously served as the commander of the U.S. Army Transportation Center and School, Fort Eustis, Va.; and before that he was assigned in the office of the Deputy Chief of Staff for Logistics, where he supervised the activities of the Army Supply Management Course and the Logistics Management Center at Fort Lee, Va.

and objective of this assignment with respect to DOD military traffic, land transportation and common-user ocean terminals are:

- To eliminate duplication and overlapping of effort between and among Military Departments, Defense Agencies, and other components of DOD.

- To improve the effectiveness and economy of these operations throughout the DOD.

- To ensure that the approved emergency and wartime requirements of the DOD are met."

The assigned functions consisted primarily of those previously assigned to other DOD agencies, although in some areas the MTMTS role has since been broadened. Top priority was necessarily given to in-

oriented to the growing requirements of DOD, to a large degree directed by the Vietnam war.

The mission of MTMTS is to meet the military needs in peace and war, with the accent on wartime readiness and effectiveness. Our job begins at the time it is decided what is to be moved, where it is to go, and when it must arrive at destination. The what, where and when are not our decision. The how of movement and the control necessary to assure the when are the responsibility of MTMTS. Naturally, this dictates a good working relationship with a great many agencies—especially with MSTS, MAC and the commercial carriers. Of course, there are differences of opinion from time to time but these are usually resolved on a give-and-take basis. We have developed an understanding of each others problems, thus strengthening the kinship of purpose between us.

Dual Environment

Vietnam has been especially challenging to DOD logisticians. Never before have we had to operate in such a unique environment. Our commitments in Vietnam impose wartime requirements on the other end of the logistics pipeline, while on this end we are required to function on a peacetime basis. Operating in this dual environment, we at MTMTS are obliged to act as a buffer. We absorb the shock of the rigid wartime requirements, and we translate those requirements into requests acceptable to the transportation industry. Thus, without unduly disturbing the peacetime pace at home, we see to it that men and materiel are moved to Vietnam on schedule.

It was impossible to predict the outcome of the task that lay ahead once it was decided to deploy large combat forces to Vietnam. The prob-

lem was not limited to merely deciding the quantity of materiel needed. How to get it there became a prime factor. Distance, geography and escalating demands, all had to be considered.

A logistics pipeline of this magnitude, extending over a distance of 10,000 miles, involves a host of interrelated factors, all of which must be brought into play in their proper time and place. Production, transportation and ultimate receipt on the far shores for onward distribution to our combat forces are, of necessity, related to one another. Obstructions at any point along the line can affect the efficiency of the entire system.

It is one thing to move supplies through a system when facilities are



tegrating these functions into an effective transportation management organization in order to carry out its responsibilities.

During the first two years a series of organizational and realignment actions was undertaken, each designed to permit better management and control. These included conversions of 15 unilateral or bilateral military ocean terminal organizations into four common-user terminals, thus achieving a measure of efficiency and economy. In addition, 15 military departmental elements at aerial ports of embarkation were converted into seven military air coordinating offices. Five defense traffic management regional offices were eliminated and two MTMTS Area Commands were established. By this latter action, the processing time for export release was reduced from six to seven days to 48 hours, thus significantly increasing responsiveness to the military users of MTMTS management services. These and subsequent realignment actions were



well established. It is quite another where facilities are virtually nonexistent. There was in South Vietnam only one deep water port—Saigon. Yet, in the first six months after our major deployment began, 200,000 troops were moved into the country and supplied with the thousands of items needed for combat operations and their health and welfare.

Control of available transportation in the United States and the flow of transportation to Vietnam was paramount. In the early days of the Vietnam buildup, delays in port discharges had an adverse impact on ship turn-around time. The inadequate logistics base on the other end slowed down port clearances considerably. As a result ship availability was reduced, requiring extraordinary measures to procure additional shipping. This critical problem was such that at one time 162 ships were somewhere enroute from the Continental United States, or being off-loaded or awaiting discharge in



Southeast Asia. MTMTS had to exercise the necessary control to ensure that priority cargo was moved, and the less critical cargo was delayed either at the port or the depot.

From less than 35,000 measurement tons shipped in January 1965, 800,000 tons per month are now being shipped. From the limited capability of one deep water port, seven modern port facilities are now in operation in South Vietnam. As a result, we are now processing more than 100,000 items ranging from fuel and ammunition to frozen meat and vegetables. These statistics reflect the tremendous effort that has gone into the rapid expansion of our logistics base, not only over-



seas but in the United States as well. These statistics are also indicative of the extent to which MTMTS and the transportation industry of the United States are involved in supporting our combat forces.

MTMTS Responsibilities

The broad and complex responsibilities of MTMTS embrace five basic functional areas:

- MTMTS provides planning support to the Armed Forces on such matters as transportation management, ocean terminal operations, transportation engineering, and other related items.

Transportation planning is a key logistic factor which must be considered in all defense planning strategy. At MTMTS, we regard transportation planning as the essence of logistics preparedness.

Our chartered responsibility in this important area falls into three categories: We develop internal transportation plans; we furnish planning support to the Armed Forces; and we plan for the utiliza-

tion of commercial and military transportation resources in the United States in the event of emergency. These responsibilities naturally dictate extensive liaison with the Joint Staff, the Military Departments, other single-manager transportation agencies, and the commercial transportation industry in the United States.

- MTMTS operates assigned military ocean terminals in the United States, certain overseas terminal units, and the Department of Defense Railway Interchange Fleet.

MTMTS operates 18 military ocean terminals and outposts in the United States and nine overseas terminal units, primarily in support of Air Force activities in Europe, North Africa and the Near East. MTMTS was first tested two and a half years ago, when it arranged the movement of the First Cavalry Division (Airmobile) and the Ninth Infantry Division. Advance parties were quickly airlifted to Vietnam and the main body went by sea. The First Cavalry moved from ports on the East and Gulf coasts and the Ninth Infantry from the West Coast. Since then the workload through our west coast ports has nearly tripled.

Operation of the Department of Defense Railway Interchange Fleet involves control and maintenance of cars registered for service on the nation's rail lines. These cars are used to augment commercial capability not otherwise available.

- MTMTS controls the procurement of commercial transportation services and the movement of traffic into air and through ocean terminals in the United States.

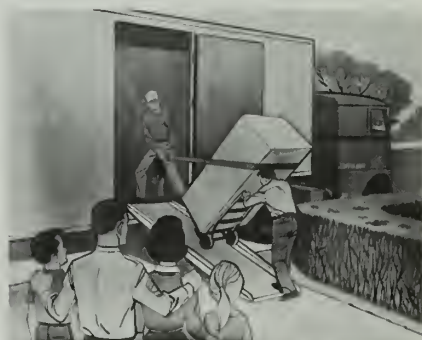
To perform this important task, MTMTS relies heavily on the commercial transportation industry of the United States. This basic policy was established on a government-



wide basis 13 years ago and reaffirmed last year. The application of this policy is not only in the national interest, but supports the specific interest and objectives of DOD. Reliance on commercial sources for transportation services precludes MTMTS procurement, operation and maintenance of transportation equipment and facilities at the risk of obsolescence.

During FY 1967, about 20 million measurement tons of cargo and a quarter million passengers were processed through MTMTS ocean terminals. At the same time, input to the air terminals amounted to 322,000 short tons of cargo and 160,000 passengers.

- MTMTS manages the DOD personal property, moving and storage



program on a world-wide basis. This function involves the movement and storage of personal property belonging to members of the Armed Forces.

This program, so important to the welfare and morale of the military family, is managed through the transportation officers at military installations who are actually the points of contact with Service members. MTMTS, however, provides the technical direction and supervision. The program, which annually results in about a million shipments, costs approximately \$432 million annually. To provide more efficient and economical service to the Serviceman and his family, MTMTS has instituted a variety of new programs. Chiefly, these are the development of management tools to evaluate and govern traffic patterns, storage service, transit time, quality of service and shipper, and carrier performance. MTMTS believes these programs will contribute immeasurably to enhancing service, saving time, and cutting costs.

• **MTMTS develops integrated transportation data systems, through-movement programs, transportation engineering studies, and studies pertaining to highways for national defense.**

Technological advances and expanding military requirements demand bold and imaginative new programs. The developmental programs at MTMTS are tailored to improving strategic mobility and providing more responsible and economical service to DOD. The application of systems analysis and computers to transportation problems are expected to have far-reaching implications. AUTOSTRAD (Automated System for Transportation Data), with its varied sub-systems, is being designed to eliminate bar-



riers to progress and responsiveness. Transportation engineering studies now under way will assure timely employment of cargo and personnel free from natural and man-made restraints. These studies include mode limitations, existing and planning transportation facilities, traffic flow patterns, documentation, and a host of related matters essential to transportation progress.

Jointly Staffed Agency

MTMTS is jointly staffed with about 1,000 Army, Navy, Air Force and Marine Corps personnel, and nearly 6,000 civilians. Of this total of 7,000, about 500 are assigned to the MTMTS Headquarters located in the Nassif Building at Bailey's Crossroads, Va., near Washington, D.C. It is the only jointly staffed, single-manager transportation agency. MTMTS has been all Navy from the outset; MAC did have some Navy personnel at first, but is now exclusively Air Force staffed.

The Headquarters is structured

along conventional lines except that there are two deputy commanders: Air Force Brigadier General Thomas L. Hayes is Deputy Commander for Management and Systems, and Rear Admiral Elliott Bloxom is Deputy Commander for Operations.

Operating on the principle of centralized control and decentralized operations, MTMTS is composed of two field commands and a specialized transportation agency:

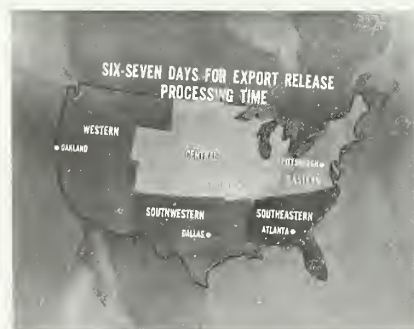
- **Eastern Area**, with headquarters in Brooklyn, N.Y., is commanded by Brigadier General Arthur Hurow, USA.

- **Western Area**, with headquarters in Oakland, Calif., is commanded by Brigadier General John D. Crowley, USA. Both have Air Force deputies and like MTMTS Headquarters are jointly staffed throughout.

- **The Transportation Engineering Facility**, located at Fort Eustis, Va., is directed by Richard K. Hutson. He has an Army deputy. (See organizational chart on page 6)

The line of demarcation separating the two field commands runs along the Mississippi River. Each command is responsible for domestic traffic management service within its boundaries. However, each has additional and sometimes unique responsibilities. For example, the Eastern Area controls and manages the DOD Freight Rail Interchange Fleet and has cognizance over all bulk liquid traffic—both tasks are national in scope.

The Western Area furnishes ocean terminal services at many points along the West Coast. During the past two years its workload has nearly tripled. The Eastern Area is responsible for terminal operations along the eastern seaboard, the Gulf Coast and the Great Lakes, plus nine overseas terminal units in Europe, North Africa and the Near East.



Financial Management in MTMTS

MTMTS has the responsibility for stewardship over a large portion of the DOD transportation dollars and has, as one of its command goals, the providing of high quality service which meets desirable time criteria at the lowest overall cost. In carrying out its role as a single-manager operating agency for military traffic, land transportation, and common-user ocean terminals, MTMTS influenced the expenditure of over \$2 billion of DOD transportation funds in FY 1967 (Figure 1).

The \$1.1 billion CONUS freight costs represent the total government bill of lading (GBL) and commercial bill of lading (CBL) DOD traffic moved in the United States in FY 1967.



From a dollar standpoint, personal property is the largest single commodity shipped by DOD. Personal property includes household goods, personal effects, unaccompanied baggage, professional books and equipment, and house trailers. The \$498 million figure covers accessory charges, such as storage, packing and crating, as well as transportation charges.

The \$210 million CONUS passenger costs were incurred in the movement of DOD personnel by transportation requests within the United States.

The three major areas of fund requirements covered in Figure 1 are budgeted for by the respective Military Services. However, the expenditure of these monies, and economies realized, are strongly influenced by the management actions of MTMTS in carrying out its assigned traffic management functions. The remaining item of \$260 million, covers operations of the MTMTS ocean terminals in CONUS, is funded by the Army Industrial Fund (AIF).

MTMTS operations under the AIF continue to expand in support of the war in Vietnam. The estimated FY 1968 expenses total \$262.6 million consisting of the following:

	(Millions)
Contractual Services	\$136.6
Cross-Service Agreements	57.4
Salaries and Wages	53.2
Materials and Supplies	9.8
Other Costs	5.6
Total	\$262.6

Contractual services and cross-Service agreements are primarily for cargo handling and related terminal costs. The cross-Service agreements are with the Navy to handle cargo, for the most part ammunition and explosives, through Navy terminal facilities.

The AIF is a revolving fund and revenue is generated through charges made to ordering agencies (customers) which include shipper services, tenants, military and commercial vessel operators, railroads and others. Also, reimbursement is made

from Army appropriated funds provided MTMTS for carrying out its traffic management mission.

The goal in AIF management is to operate on a break-even basis so that, on the one hand, the corpus of the fund will not be depleted while, on the other hand, an overcharge will not be made against customers, these customers being primarily other government agencies. The estimated FY 1968 revenue by mission is:

	(Millions)
Cargo Handling	\$200.3
Auxiliary Cargo Services	5.0
Parking Services	3.7
Traffic Management	17.0
Services to Commercial Vessels	9.2
Services to Military Vessels	10.1
Passenger Processing	2.3
Support of Tenants	6.9
Defense Rail Interchange Fleet	1.6
Mortuary Services	1.1
Military Family Housing	.3
CONEX Container Repair	.2
Other Products and Services	4.9
Total	\$262.6

Pre-determined rates are developed covering the majority of services furnished, such as cost by commodity for cargo handling, cost by passenger for processing, and space occupancy charge for tenant agencies. Rates for mileage compensation for MTMTS-owned railway freight and tank cars, assigned to the Interchange Fleet, are based on those published by the Interstate Commerce Commission in the Mileage Tariff-Series 7-Z, ICC H-3. Mortuary services are performed at the Oakland Army Base for returned war dead with reimbursement made by the Military Service concerned. The cost for operating and maintaining military family housing is reimbursed from the Army appropriation for military family housing based on direct costs plus applied overhead.

Development Programs

During the past two years a great deal of progress has been made in developing integrated transportation information data systems. AUTO-STRAD, with its subsystems, will assist the management and accelerate the movement of the increasing volume of DOD cargo and passengers. The plan provides for six major functional systems corresponding to MTMTS functional areas of responsibility.

The problem of maintaining status of shipments and knowing what is in the transportation pipeline has plagued the traffic manager for many years. Manual tracing methods are normally very slow and unreliable. As an initial effort to correct this situation, a Shipment Status System has been designed, called STAT-TEM. This system will provide the traffic manager the status of a given shipment, and/or the inventory of a specific commodity in the transportation pipeline en route from the shipper to the overseas port of discharge. The traffic manager will use a remote input/output device to make inquiries and receive information on shipments of critical items currently in the pipeline. Initially, this system will include critical items en route to Southeast Asia. Subsequently, it will be expanded to include critical items in the pipeline worldwide.

One of the critical problems in managing the Personal Property

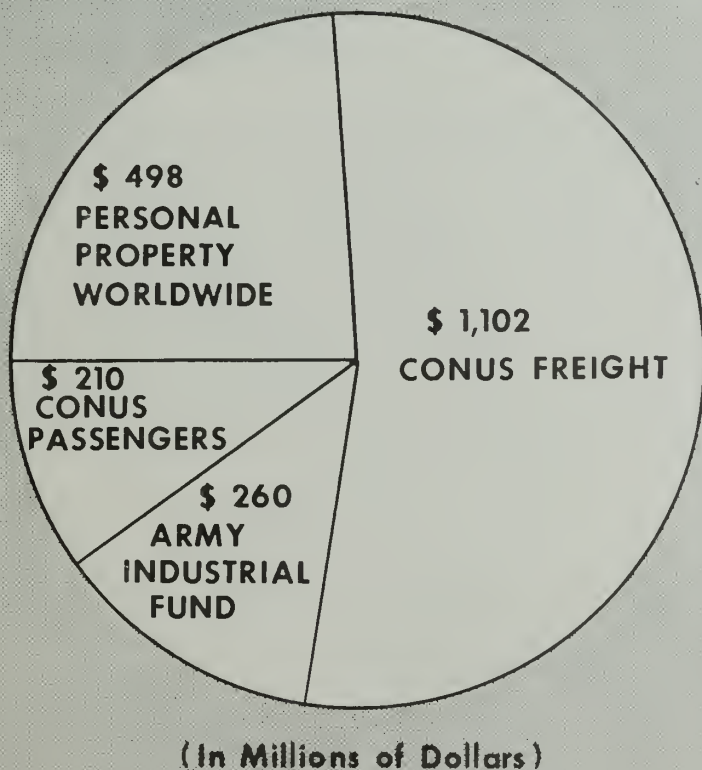
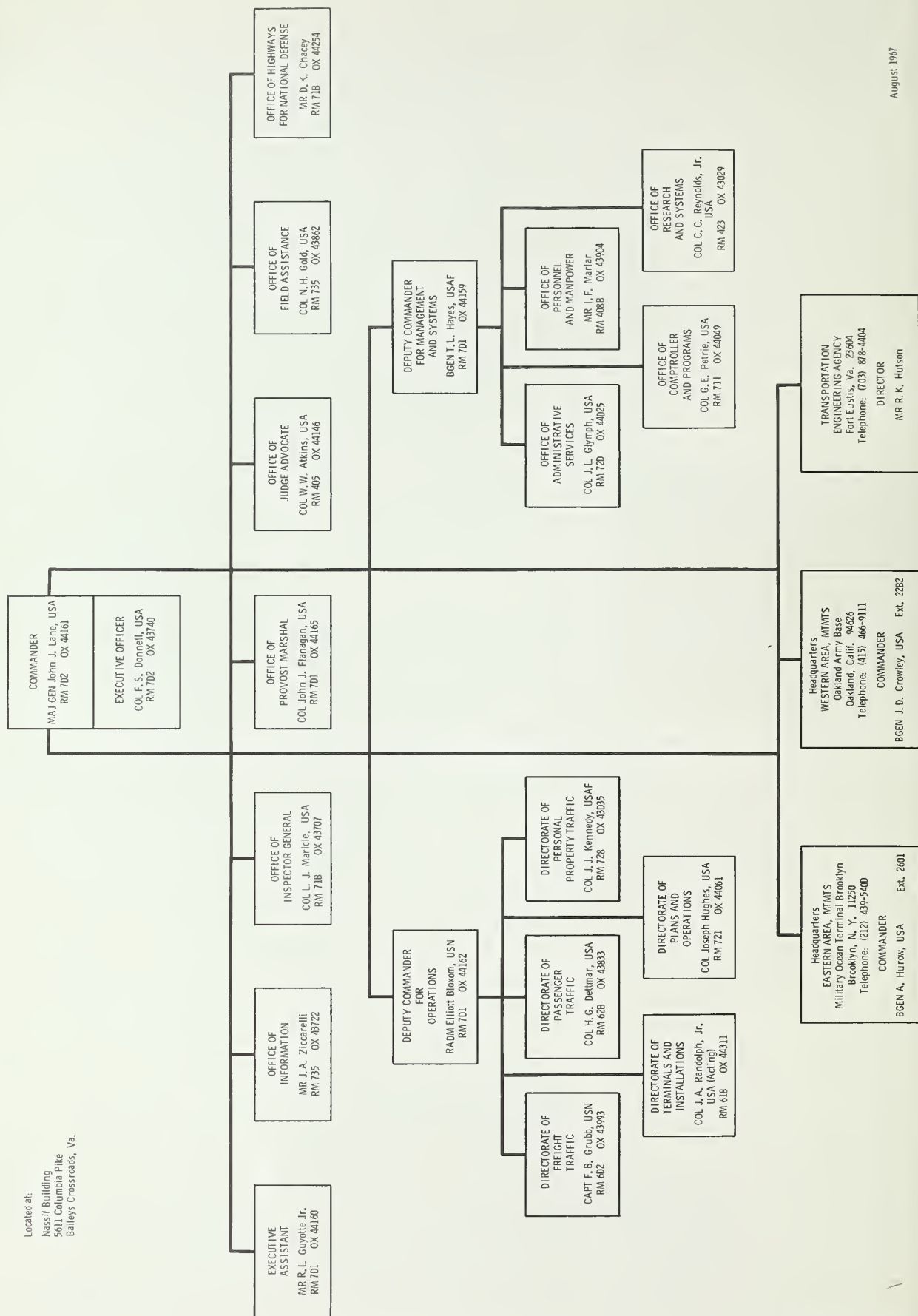


Figure 1.

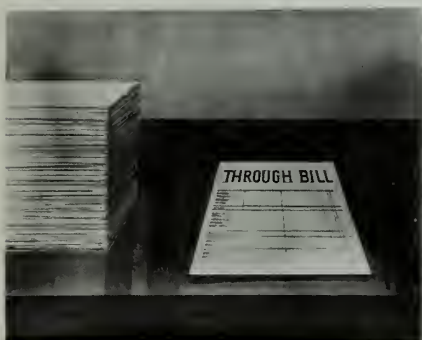
HEADQUARTERS MILITARY TRAFFIC MANAGEMENT AND TERMINAL SERVICE Washington, D. C. 20315

Located at:
Nassif Building
5611 Columbia Pike
Baileys Crossroads, Va.



August 1967

Program has been a lack of sufficient data on household goods movements, such as cost and quality of service. Prior to the establishment of MTMTS, there was no single cohesive system to bring this data together in an effective manner to support appropriate policy development or revision. The world-wide Household Goods Information System for Traffic Management, which we have termed WHIST, is an integrated system which is being designed to provide timely and complete automated data for evaluating the DOD Personal Property Traffic Program, based upon the three dimensions of service, time and cost. At the present time eight of the 15 WHIST subsystems are operational. The WHIST subsystems currently operational in-



clude the automation of Through-Government-Bill-of-Lading and Government-Container-Method rate data, for use by transportation officers at military installations, and automated data summaries for evaluation of carrier performance. WHIST, when fully implemented, will provide a complete range of detailed and summary traffic management information to assure that military personnel receive quality service in a timely manner and at reasonable cost to DOD.

Concurrent with the development of new systems, we are upgrading our computers and peripheral equipment. When MTMTS was formed, we inherited several dissimilar computer installations at our various commands. The lack of compatibility of these computers, coupled with an increasing data processing workload in support of Southeast Asia operations, created a severe shortage of computer capability. High speed, mass storage, third generation computers were urgently required. During the latter part of 1966, we

completed the numerous technical and administrative actions required to procure new computers. In August 1967, identical B5500 computers were installed at our Eastern Area and Western Area commands. In addition to their increased speed and processing capability, the B5500s will permit standardization of area data systems. This will facilitate interchange of data between the area commands and permit reciprocal computer support.

Terminal Modernization

One responsibility of MTMTS is the operation of ocean terminals. During the first two and a half years of operation, our ocean terminals experienced a tremendous increase in workload. In FY 1967 almost 21 million measurement tons moved through the CONUS terminals. This represents an increase of approximately five million tons over the amount moved in FY 1966.

A remarkable side of this workload performance is that all this tonnage was being moved at a time when MTMTS was realigning and consolidating its terminals. Nevertheless, we were able to meet the challenge of Vietnam without delays. We now load ships for a single port of discharge in Vietnam, thus increasing the turn-around time of much needed ships and reducing port congestion as well. At the same time we are modernizing the Military Ocean Terminal at Bayonne, N.J., and the Military Ocean Terminal Bay Area at Oakland, Calif., both high on the priority list in MTMTS planning for the future.

At Bayonne plans have been developed for conversion to automated controlled and mechanized receiving, sorting, distributing and container-stuffing facilities. Third generation automatic data processing equipment will be used to direct the sort-



ing and movement of the cargo. The plan also provides for a container storage area capable of accommodating 2,000 40-foot containers, as well as expanding berth facilities at both terminals to efficiently handle roll-on/roll-off ships.

One of our terminal problems is the massive administrative workload associated with daily inventories and the manual development of required detail, applying to thousands of shipments from hundreds of points of origin to hundreds of destinations.

The speed and data-compiling capabilities of third generation computers will provide the means to evaluate the time a shipment "sits" in a terminal prior to being loaded. Operating techniques, releasing and booking procedures, and the time



frames prescribed by various directives can be beneficially refined as a result of a new "Time-in-Terminal" report recently developed by MTMTS.

The report is designed to summarize all cargo lifted from ports of embarkation to ports of debarkation by priority, percentages of priorities, commodity, sea express, privately owned vehicles, household goods and other cargo. The report will indicate the time spent in the terminal and the reason for delay, if delayed.

The report is expected to become an invaluable data bank and management tool for all elements connected with export movements of cargo.

Container Services

The rapidly increasing availability and use of container services is the single most important development in transportation today. We estimate that more than 60 percent of all military cargo shipped can be moved in containers where such services are available. We are now shipping virtually all cargo in containers, which

can be shipped via that method, to Alaska, Hawaii, Okinawa and Puerto Rico. We are increasing use of container service to Europe and the United Kingdom, (now about 40 percent), the Mediterranean, Japan, the Philippines and South Vietnam. We also anticipate institution of container service to Korea, Taiwan and Thailand as the situation warrants.

Such services are having an impact on the requisition, procurement, supply and delivery cycle through reductions in packaging costs, loss/damage/pilferage, and transit time. We are also endeavoring to increase the use of container service in the movement of material directly from supplier to user, in order to gain the maximum benefits.

Project TICO

Project TICO (Through Intermodal Container Operation) was established in MTMTS on March 1, 1967, for the purpose of implementing command policy for the full exploitation of the through-container through-government bill of lading (TGBL) concept. Progress, while not as rapid as we desire, is steady and results are being obtained. Traffic flow patterns, identifying containerizable cargo on second destination traffic, have been developed and are being furnished on a monthly basis. This data is utilized to approach the transportation industry for through-movement tenders. Currently, 165 TGBL tenders have been accepted and distributed for use.

It is proposed to capture, in the near future, traffic flow patterns on first destination traffic. Plans are in effect for an education and training program to apprise DOD shippers of latest developments and accomplishments on containerization. Further gains are expected in the areas of funding, additional through-container tenders, reduced and simplified documentation, clarity in the areas of uniformity, and legislation more favorable to intermodal operations.

Rail Modernization Program

MTMTS owns a fleet of 5,403 rail cars which are in operation on the nation's rail lines. Eight hundred and ninety-five of these are a specialized DF (damage free) type boxcar, ideally suited for the movement of ammunition and explosives by rail and generally not available from the railroads.

The DF boxcars were acquired by the Services during the Korean conflict and are over 15 years old. As a result, a five-year boxcar modernization program is being undertaken. It will embrace the procurement of 1,000 hy-cube specialized DF boxcars in 200-car increments annually beginning in FY 1969. This program will cost \$4 million annually through the total procurement period; however, each car purchased will result in a net advantage, or savings, to the DOD in excess of \$5,000 per year.

Troop Support

During the period April 1965 through August 1967, approximately 17,000 carloads and 5,400 truckloads were utilized in the movement of unit equipment within CONUS in connection with the Southeast Asia buildup, at an estimated cost of \$35.7 million. Due to the occasional shortage of rail equipment CONUS-wide, a close surveillance program was initiated to insure maximum utilization of carrier's equipment. Transit times and good service routes were developed to insure timely arrivals at outloading ports. As a result, delays in transit have been negligible.

Air Export Control

Recently DOD recognized that certain categories of material being airlifted to points outside CONUS were generally suspect for movement by air. In this regard DOD directed MTMTS, as the airlift clearance authority, to initiate a stricter "challenge for air eligibility" program for certain commodity groupings, as well as air shipments resulting from supply actions taken more than six months ago. Even though it is recognized that the identification of air eligibility is a function of the Service, the revalidations required by challenge actions from MTMTS has:

- Assured that only material that is truly airworthy is in the airlift system.
- Diverted shipments, screened or challenged out of the system with shipper Service concurrence, into the sealift system as sea express cargo.

Cost Avoidance

During FY 1967, MTMTS experienced a cost avoidance of approximately \$25 million attributable to negotiation actions conducted with the transportation industry. Of this

amount, approximately \$18 million was the direct result of successful rate negotiations, conducted on the basis of volume movement reports received from all shipping sources of DOD. The balance resulted from transit negotiations activities.

This is a continuing program which we feel holds great promise.

A significant aspect of the role of logistics in peace and in war is the vital CONUS movement link. This is the link which must be capable of initiating the first phase of military response to distant crisis, and of meeting the longer term requirements of the inevitable buildup of forces and supplies. This link is the specific province of MTMTS.

Quick reaction to DOD's vast requirements necessitates the maintenance of a readiness posture sufficiently flexible to meet all possible contingencies. MTMTS must maintain a current awareness of personnel and equipment configuration of units; it must know the loading rate and locality of units; it must know the availability of aircraft, rail equipment and motor vehicles—both commercial and military; it must assess the fluidity of air and ocean terminals; and it must control and regulate the movement of units compatible with the availability of ocean shipping and intercontinental airlift. Precise scheduling and, of course, detailed and continuous planning is required.

The key to the orderly flow of military movements to Southeast Asia, we believe, has been the result of our control of the initial movements in the United States. At the same time, this success is a tribute to logistical and transportation managers of the three Services and the American industrial base on which we must depend. Our reliance on the transportation industry has been a vital factor in the establishment and maintenance of our defense transportation systems. This splendid DOD/industry effort has prompted General Westmoreland to state that,

"Never before in the history of warfare have men created such a responsive logistical system. . . . Not once have the fighting troops been restricted in their operations against the enemy for want of essential supplies."

How Will It Affect the Defense Contractor?

Commander A. G. Cavanaugh, SC, USN

Military Standard Contract Administration Procedures (MILSCAP) is a DOD data system, designed to translate into punched card form the essential elements of contract content, in order to take advantage of rapid communications techniques and allow it to be processed mechanically. It will put into the hands of DOD contract administrators and contracting officers a considerable amount of information on contract status and contractor performance. Industry is beginning to ask "What will this mean to me?" A description of the system may provide the answer to that question.

The purpose of MILSCAP, developed by the Defense Department for

use by the Military Services, the Defense Supply Agency and the Defense Contract Administration Services, is to standardize information data in the functional areas of procurement, contract administration, inventory control, storage and financial accounting.

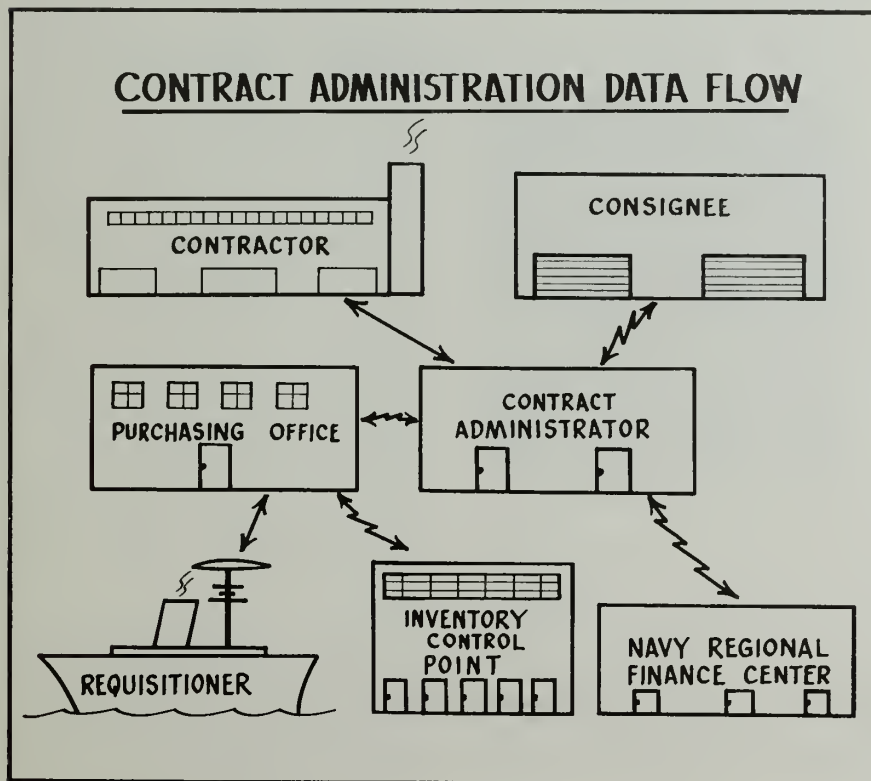
The new system will replace a variety of non-standard procedures now in use by procurement and contract administration activities throughout DOD. MILSCAP will be installed progressively because of its impact on existing procedures and may require two or three years for complete implementation.

MILSCAP will be an integral part of other DOD standard logistics

data systems, such as MILSTRIP (Military Standard Requisitioning and Issue Procedures), MILSTRAP (Military Standard Transaction Reporting and Issue Procedures), and MILSTEP (Military Supply and Transportation Evaluation Procedures). Procedures under MILSCAP are authorized by DOD Directive 4105.63 and are described in detail in DOD Manual 4105.63-M.

At the time a contract is executed a set of punched cards, called an abstract, will be prepared at the purchasing office. Administrative data cards will contain the contract number, effective date, codes to identify the purchasing office, the contractor, the paying office and the administrator, discount terms, authority delegated to the administrator, and other data applicable to the contract as a whole. Item data cards will describe the material or services being procured with a stock number, manufacturer's part number, a brief description, quantity and price. Schedule cards will contain delivery dates and consignee identification. Accounting cards will cite the funds to be charged.

This contract abstract will be immediately transmitted to the field administrator via the Automatic Digital Network (AUTODIN), the DOD communications network. The administrators are the regional offices of the Defense Contract Administration Services or the plant representatives under the operational control of the Army, Navy and Air Force. The data will be recorded in a master contract file at the administration offices in some type of memory device which will be readily accessible for inquiry, and will provide management with



current information in the form of printed reports.

The system also provides for follow-on communications between the purchasing office and the field administrator, and a means to update the contract file. Formats are prescribed for revising the abstract, based on modifications issued by the contracting officer. Message cards will request the administrator to negotiate accelerated deliveries, provide line item status, and furnish supplemental information.

Flowing in the opposite direction, formats are being developed to permit the administrator to request additional information from the contracting officer, to advise him of a potential or actual slippage in delivery dates, and to reply to his requests for status or accelerated delivery. The system also provides for mechanized shipment notices to supplant the present distribution of the contracting officer's copy of the Material Inspection and Receiving Report (DD Form 250). It allows consignees to report acceptance of material via AUTODIN, and the transmission of payment notice cards to the cognizant accounting offices in lieu of hard copy vouchers.

Originally MILSCAP was conceived as a communications link between agencies of the Defense Department. How then will it affect the contractor? The astute contractor will recognize that the impact may be substantial as the system will give to the administrator a wealth of contract status information and, thus, contractor performance data, the end result being closer surveillance of delivery date slippages.

The Government enters into an agreement with a contractor for the delivery of goods by a specific date. This date is established to meet a specific need and the contract price is generally affected by this requirement. The value of the goods theoretically diminishes when delivery occurs after the established date, therefore a monetary consideration should pass to the Government in these cases. We can deduce from this that the contractor, who enters into a contractual arrangement with the knowledge that he cannot

comply, has an unfair advantage over his competition. His competitors may have quoted the job on an extra effort basis, thereby pricing themselves out of consideration.

The data available from MILSCAP, therefore, should work to the advantage of the scrupulously honest contractor and against those who have a tendency to base their quotations on minimum effort, regardless of delivery requirements, by assuring that the Government is adequately compensated for delivery delays which are the fault of the contractor.

What other impact will MILSCAP have on the defense contractor?

The information on past performance of contractors will be available to contracting officers in the MILSCAP data bank to assist in future bid evaluations.

The "standardization" effect of MILSCAP will result in a reduction in the number of special reports required, providing a welcome relief to contractors harassed by requests for reports.

Faster payment of invoices will be possible due to the reporting of receipts by AUTODIN instead of mail. The benefits of this procedure

should begin soon because of expected early implementation of this portion of MILSCAP.

Contractors may be asked to provide certain information to administrators in MILSCAP format, *e.g.*, shipment notice cards, revised delivery forecasts, etc., to facilitate transfer of information to contracting officers.

MILSCAP implementation is still two or three years away and a good deal remains to be done during this period. Operating procedures must be developed, hardware and personnel assets must be acquired, and a pilot test must be conducted. Still it is not too early for the defense contractor to be thinking about MILSCAP, for he must eventually come to grips with the possible impact on this program on his operation.

U.S. Army Metrology and Calibration Center Activated

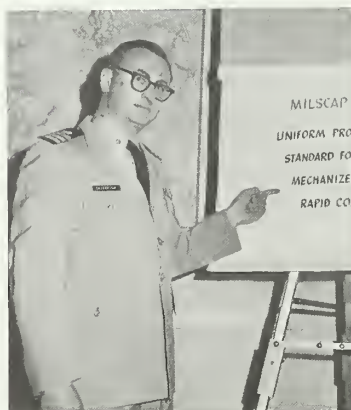
The U.S. Army has activated a Metrology and Calibration Center at the Army Missile Command, Redstone Arsenal, Huntsville, Ala., consolidating all calibration and metrology functions of the Army.

Among the new missions of the center is management of the world-wide calibration effort at 13 locations. In addition, primary reference calibration responsibilities have been assumed from Tooele Army Depot, Utah.

Nucleus of the new facility is the former Metrology Center, previously a part of the Directorate of Arsenal Support Operations. It has been established at the same level as the command's several major directorates. Lieutenant Colonel Peter L. Hume will head the center.

Newly acquired responsibilities of the center include management, technical direction, fundamental metrology, and engineering support for the Army's calibration and metrology mission.

The Alabama center will also be the focal point for inventory control and procurement. In these areas it will coordinate with other command directorates which have the basic missions for handling these functions.



Commander A. G. Cavanaugh, SC, USN, as MILSCAP Coordinator in the Office of the Chief of Naval Materiel, is responsible for development and implementation of the MILSCAP Program. He is a 1950 graduate of Rutgers University and was commissioned in the Navy Supply Corps in November 1951.

The Interagency Data Exchange Program

George S. Peratino

Office of Deputy Chief of Staff, Systems & Logistics
Headquarters, U.S. Air Force

The Interagency Data Exchange Program (IDEP) originated when the Army, Navy and Air Force ballistic missile agencies combined their efforts to solve an urgent problem that concerned all three Services: duplication of testing efforts. Many designers, developers and producers of military materiel were performing nearly identical tests on a particular type of component or material. Such duplication had to be paid for ultimately—by U.S. taxpayers—in higher defense costs. More effective component testing and data distribution would improve scheduling of the nation's new missile projects.

Original approval of IDEP was obtained in 1959 from the commanders of the Army and Air Force ballistic missile programs and the Navy Special Projects Office.

Today the program has been approved at the Assistant Secretary level for Research and Development in the Army, Navy and Air Force. In December 1966, IDEP became an interagency program when the Assistant Administrator for Industry Affair of the National Aeronautics and Space Administration (NASA) signed the current charter.

Organization

IDEP's organization is an outstanding example of cooperation among the Military Services and NASA, who fund the program, and the industry participants. The IDEP Policy Board consists of one representative from each Service and NASA. The board develops and approves program policies and management procedures for the administration of IDEP. Each Service maintains an IDEP office, through which program materials and services are provided to all participants. Representatives from the IDEP offices and the Policy Board meet regu-

larly to maintain a cooperative approach toward all aspects of the IDEP operation.

The Contractors Advisory Board, elected from participating industry members, provides assistance and guidance to the IDEP offices and the Policy Board to reflect the changing needs of industry participants.

How IDEP Functions

Since IDEP's establishment in 1959, emphasis has been on the immediate transmittal of current information directly to potential users. The intent of IDEP is to have the data waiting for the engineer rather than to have the engineer waiting for the data.

Participants in IDEP submit test reports and specifications to the IDEP offices on electronic, electrical, mechanical and electro-mechanical parts and components; materials; production processes; pyrotechnic test equipment devices; procedures; reliability information; and many other subjects.

The IDEP offices provide each participant, free of charge, with a complete report file on microfilm. Currently there are over 20,000 reports on more than 30,000 separate items in the file, estimated to have cost at least \$50 million to create. Each month 250-300 new reports are added. A simple, proven retrieval system makes any of this information available to the engineer within seconds of his request.

Ease of Data Retrieval

The IDEP data retrieval system is designed for rapid, error-free use without elaborate equipment. A quarterly report listing, arranged by a nine-digit, part-identification code, refers the engineer directly to the part/component group in which he is interested. Once within this group, he can further identify each report by part description and number, test environment, vendor, etc. Or, rather

than use this index, he can use IDEP's visual coincidence report indexing system, a set of perforated cards indexing each report by part type and test environment, to immediately identify all reports which satisfy these search criteria.

In either case, the indexing system will refer the engineer to one or more microfilm cartridges. Using a microfilm reader-printer, he can locate and scan a report and, if desired, obtain a full-size copy of any page in a matter of seconds.

Advantages to Federal Government

Each report in the IDEP system represents unlimited potential savings in time, dollars and technical skills. Where a report in the file indicates that a part satisfies some or all of an engineer's requirements, he can reduce or eliminate what would have been a redundant test. A recent annual IDEP survey documented over \$5 million in such savings. Such savings include only planned tests which were shortened or eliminated.

Advantages to Industry

An estimated 20-30 percent of a design engineer's time is spent in data search, much of it frustrating and unsuccessful. Even if he gets the information he needs, chances are that it cost him a lot of valuable time away from his work. IDEP provides a proven means of reducing the expenditure of time and money by placing, within easy reach of the engineer, the information he needs to do his job. It makes available component information generated by other engineers working on similar problems for other government-funded projects. IDEP benefits to the industry participant are:

- Efficient information retrieval.
- Realistic bid proposals through access to current parts information.

- Reliable parts selection in designs to avoid possible systems failures.

- Advanced parts information to promote improved performance; shortened delivery schedules.

- Improved test reporting resulting in higher output per test dollar.

- Accelerated parts specification writing and test planning—expediting eventual introduction of standardized improved parts.

- Provision of direct intercontractor inquiries in urgent cases.

- Suggested alternate vendor sources.

- Source of general advice, confirmation, and general education at early program development stages.

How To Participate

Eligibility for IDEP participation is limited to government agencies and contractors who are users of parts and components procured for incorporation into the design, development and production of equipment for weapon systems and ground based command and control systems. IDEP was established on a voluntary basis. A participant must submit test reports to the IDEP before being eligible to receive the test reports submitted by other participants. Participation in IDEP cannot be charged against government contracts. The benefits of participation far exceed the small investment in money, manpower and time required to establish and maintain an IDEP operation. Additional information concerning IDEP can be obtained by contacting one of the following IDEP offices:

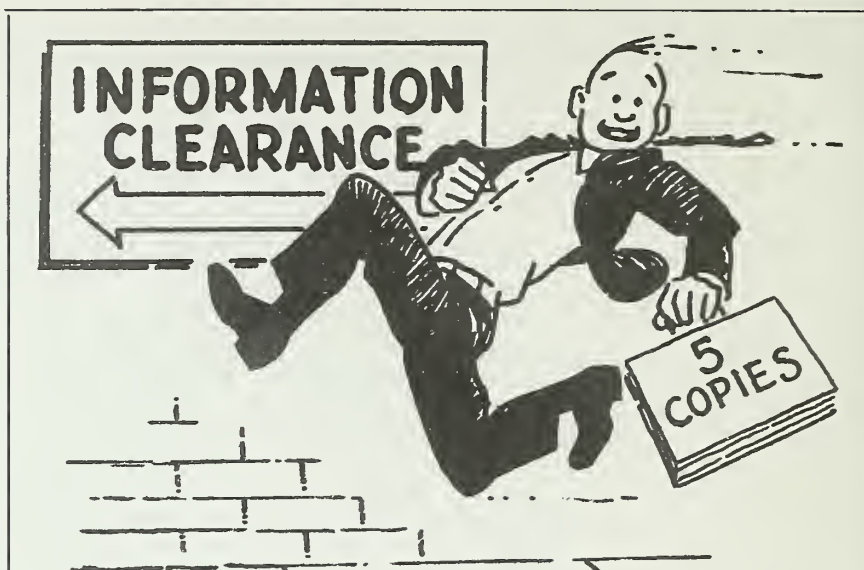
Air Force IDEP Office
Space & Missile Systems Organization

Los Angeles Air Force Station
Air Force Unit Post Office
Los Angeles, Calif. 90045

Navy IDEP Office
Naval Ordnance Laboratory
Corona, Calif. 91720

Army-NASA IDEP Office
Redstone Scientific Information Center
Redstone Arsenal, Ala. 35809

The Federal Government, through the IDEP, has made available a dynamic data exchange program. It is now up to industry to participate in this important program.



Industrial firms holding Navy contracts with components of the Naval Material Command can speed up security clearance of news items, advertisements, and other information proposed for release to the public by observing a few simple rules.

First, contractors should submit a minimum of five legible copies of all information to be released, including photographs, maps, charts, etc. The multiple copies are necessary to permit simultaneous review by the various agencies or branches which may be required to examine the material.

Contractors should give the title and description of the material and specify how, when, and where it is proposed to be released.

The time required to clear information for release varies with the length of the material, its complexity, and the number of agencies required to review the material. Normally, the procedure takes from two to five weeks.

The material proposed for release should be sent to the Naval Material Command, Public Affairs Office (MAT 09D), Room 1151, Main Navy Building, Washington, D.C. 20360. The Public Affairs Office coordinates clearance for the six systems commands, 12 project offices and 15 laboratories which comprise the Naval Material Command.

New Army Division Approved

Secretary of Defense Robert S. McNamara has approved a plan to add a new division to the Army, bringing the total number of divisions in the active force to 19 and 2/3.

Formation of the division, designated the Sixth Infantry, and new support units will begin in January 1968. The first brigade of the division completed its training in September.

The FY 1968 budget now calls for an Army strength of 1,520,000 troops, as of June 30, 1968. Revised calculations of the manpower, needed to support Southeast Asia deployments and to continue the one-year tour in Vietnam, will permit substantial reductions in trained strength

requirements previously planned for the Army. In addition, some of the Army uniformed jobs will be turned over to civilians.

As a result, the new division and the support units will be formed without significant increases in Army spending.

The net impact of the additions and reductions will result in an Army of 1,521,000 men by the end of FY 1968.

Part of the new division will be formed at Fort Campbell, Ky., and will use facilities vacated there by the remaining brigades of the 101st Airborne Division, which will be sent to Southeast Asia. One brigade of the new division will be activated in Hawaii.

Dynaplane Boat Design

Less Drag—More Speed

Model tests and computer studies at the Naval Ship Research and Development Center, Carderock, Md., have shown that the resistance of military planing boats now in use can be reduced 50 percent by design methods developed by the center.

The marked improvement in performance is achieved by means of a planing configuration, called the Dynaplane boat, which has less than one-fourth as much friction producing wetted area at high speed as the conventional planning boat design (Figure 1).

The forward lifting surface of the Dynaplane boat is designed to carry 90 percent of the total weight, while the remaining 10 percent is carried by an adjustable planing surface or stabilizer in the stern. The main lifting surface is curved (cambered) longitudinally so that it will develop the required lift on a small wetted area and, therefore, will have the least possible drag.

Shape of the camber is based on analytical work carried out by the National Aeronautics and Space Administration. This camber line curves upward in the forward part and

downward in the after area. The detailed shape of the curve for a particular boat depends on the speed and weight of the boat, and is configured by the designer so that it will develop the required lift with the least possible drag. The cambered surface ends in a step so that the flow will separate from the afterbody of the hull. The step is one-eighth of an inch deep on the eight-foot model which was tested at the center. Accordingly, it would be one-half inch deep on a 32-foot boat.

The adjustable stern stabilizer is connected to a pneumatic piston, located inside the hull in such a way that its vertical position can be controlled by compressed air. At low speeds the stabilizer is held in a retracted position against the hull, with its bottom surface parallel to the afterbody keel. At high speed, the stabilizer is lowered by admitting compressed air to the top of the cylinder. As the stabilizer moves downward, it automatically changes from a negative to a positive angle of attack. The stabilizer then planes on the surface of the water and trim angle of the craft can be regulated

by adjusting the stabilizer's vertical position. In other words, when the stabilizer is moved away from the hull, the stern is lifted and the trim angle of the craft is reduced and, when the stabilizer is adjusted to a position close to the hull, the stern moves closer to the surface and the trim angle of the craft is increased.

Accordingly, in smooth or moderately rough water the stabilizer can be used to trim the craft to the angle of least drag. Alternatively, in rough water the stabilizer can be used to trim the craft to the most suitable angle for the particular wave condition and relative heading.

Characteristics of the Dynaplane design can be advantageously applied to a wide variety of naval craft including patrol boats (Figure 2), landing craft (Figure 3), personnel transports and swamp boats, as well as commercial and pleasure craft.

The feature of greatly reduced drag can be exploited to produce either faster boats with no increase in power, or boats of equal speed on reduced power. The latter possibility of attaining the same speed as a conventional high-speed boat, on only half as much horsepower, will result in 50 percent savings in both engine cost and fuel rate, with a 100 percent increase in high-speed range.

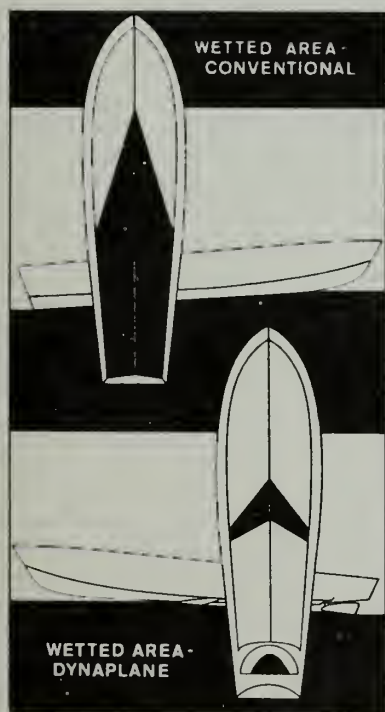


Figure 1.

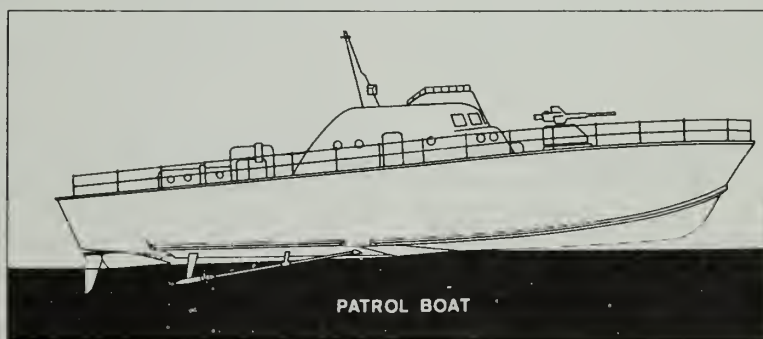


Figure 2.



Figure 3.

Calendar of Events

- Nov. 13-15: Public Relations Society of America 20th National Conference, Bellevue-Stratford Hotel, Philadelphia, Pa.
- Nov. 14-16: American Society of Tool and Manufacturing Engineers—Regional Exposition, Sheraton-Boston Hotel and War Memorial Auditorium, Boston, Mass.
- Nov. 14-16: Joint Computer Conference, Anaheim, Calif.
- Nov. 15-16: Institute of Navigation National Air Meeting, Seattle, Wash.
- Nov. 28-Dec. 1: Wire and Cable Symposium, Atlantic City, N.J.
- Dec. 3-9: Harvard College Advance Management Program, Statler-Hilton Hotel, Boston, Mass.
- Dec. 4-6: American Institute of Aeronautics and Astronautics Missile Systems Meeting, Monterey, Calif.
- Dec. 4-6: AFL-CIO Biennial Convention, Americana Hotel, Miami, Fla.
- Dec. 5: Armed Forces Management Assn. Luncheon Meeting, Officers Club, Fort Leslie J. McNair, Washington, D.C.
- Dec. 5-9: American Nuclear Society Meeting, Chicago, Ill.
- Dec. 6-7: Project ARISTOTLE Conference, Washington, D.C.
- Dec. 6-8: National Assn. of Manufacturers—72nd Congress of American Industry, Waldorf-Astoria Hotel, New York, N.Y.
- Dec. 7-15: AFL-CIO Biennial Convention, Americana Hotel, Miami, Fla.
- Dec. 14: Wright Memorial Dinner, Sheraton-Park Hotel, Washington, D.C.
- Dec. 26-31: American Assn. for Advancement of Science Meeting, New York, N.Y.
- Dec. 27-29: American Economic Assn. Meeting, Washington, D.C.
- Dec. 27-30: American Statistical Assn. Meeting, Washington, D.C.
- Jan. 4: Armed Forces Management Assn. Luncheon Meeting, Officers Club, Fort Leslie J. McNair, Washington, D.C.
- Jan. 7-12: American Chemical Society Meeting, New Orleans, La.
- Jan. 22-24: American Institute of Aeronautics and Astronautics Sixth Aerospace Sciences Meeting, New York, N.Y.

Industrial Security Excellence Cited

The 1967 winners of the annual James S. Cogswell awards for superior performance in carrying out security obligations in performance of classified defense contracts have been announced by the Defense Supply Agency.

Two types of awards will be made: plaques for outstanding performances and certificates for excellence. Fifteen plaques and 23 certificates are to be awarded.

Outstanding performance plaques will go to:

Aerjet General Corp., Sacramento, Calif.; Arinc Research Corp., Santa Ana, Calif.; Bell Aerospace Corp., Aerosystems Div., Tucson, Ariz.; The Boeing Co., Seattle, Wash.; Cornell Aeronautical Laboratory, Inc., Buffalo, N.Y.; Delta Microfilm Co., Los Angeles, Calif.; Electronic Communications, Inc., St. Petersburg, Fla.; Fairchild Camera & Instrument Corp., Syosset, N.Y.; General Dynamics Corp., Fort Worth, Tex.; General Electric Co., Apollo Support Div., Daytona Beach, Fla.; Lockheed Missiles & Space Co., Sunnyvale, Calif.; Lovelace Foundation for Medical Research & Education, Albuquerque, N.M.; Low & Associates, Minneapolis, Minn.; North American Aviation, Inc., Rocketdyne Div., McGregor, Tex.; and Sylvania Electronics Products, Needham, Mass.

Certificates of excellence will be presented to:

American Telephone & Telegraph Co., Long Lines Dept., New York, N.Y.; American Telephone & Telegraph Co., Long Lines Switching Center, Wayne, Pa.; AVCO Corp., Electronics Div., Evendale, Ohio; Bendix Corp., Towson, Md.; The Boeing Co., Wichita, Kan.; Collins Radio Co., Cedar Rapids, Iowa; General Aniline & Film Corp., Dyestuffs & Chemical Div., Central Research Laboratory, Easton, Pa.; General Precision, Inc., Aerospace Group, Little Falls, N.J.

Harvey Aluminum Sales, Defense Plants Div., Milan, Tenn.; Hayes International Corp., Birmingham, Ala.; Mine Safety Appliances Co.; Pittsburgh, Pa.; North American Aviation, Autonetics, Div., Tampa, Fla.; North American Aviation, Space & Information Systems Div., Tulsa, Okla.; North American Aviation, Los Angeles,

Calif.; Philco-Ford Corp., Aeronutronic Div. & Space Re-entry Systems Div., Newport Beach, Calif.; RCA Defense Electronics Products, New York, N.Y.

S-F-D Laboratories, Union, N.J.; Southwestern Bell Telephone Co., St. Louis, Mo.; Teledyne Industries, Inc., Goetech Div., Garland, Tex.; United Aircraft Corp., Pratt and Whitney, West Palm Beach, Fla.; Westinghouse Electric Corp., Defense & Space Center, Baltimore, Md.; Westinghouse Electric Corp., Aerospace Electrical Div., Lima, Ohio; and Wolf Research & Development Corp., West Concord, Mass.

The award is named in honor of Colonel James S. Cogswell, USAF (Ret.), first chief of a centralized office of industrial security, established under the Deputy Director for Defense Contract Administration Services of the Defense Supply Agency in January 1965.

Two Generators Earmarked for Procurement by Army

Two general purpose generator sets, developed by the U.S. Army Mobility Equipment Command's Engineer Research and Development Laboratories, Fort Belvoir, Va., have been earmarked for military procurement as the need arises.

The sets are five and 10 kilowatt, 60 cycle, AC, 120/208 volt, three phase, four wire reconnectable to 120 volt, three phase, three wire; 120 volt single phase; or 240 volt, single phase. They are members of a family that includes the one-half, one and one-half and three kilowatt sets which are all driven by military standard gasoline engines.

All sets are self-contained, air cooled and lightweight. Through maximum standardization, they feature a high degree of parts interchangeability, plus performance and reliability never achieved with their commercial predecessors. Designs are completely owned by the Government.

RESEARCH REPORTS

Authorized DOD contractors and grantees may obtain these documents without charge from:

Defense Documentation Center
Cameron Station
Alexandria, Va. 22314

Others may purchase these documents at the price indicated from:

Clearinghouse for Federal and
Scientific Information
Department of Commerce
Springfield, Va. 22151

A Systems Approach to Computer Programs. Electronic Systems Div., Air Force Systems Command, Feb. 1967, 24 p. Order No. AD-650 216. \$3.

Survey of Computer Languages for Symbolic and Algebraic Manipulations. Stanford Research Institute, Menlo Park, Calif., for the Air Force, March 1967, 64 p. Order No. AD-649 401. \$3.

Associative Adjustments to Reduce Errors in Document Screening. Westat Research, Inc., Bethesda, Md., for the Air Force, March 1967, 78 p. Order No. AD-651 630. \$3.

Magnetic Film Memory Evaporation System. MIT Lincoln Laboratory, Lexington, Mass., for the Air Force, Jan. 1967, 23 p. Order No. AD-647 209. \$3.

Joss: Console Design. Rand Corp., Santa Monica, Calif., for the Air Force, Feb. 1967, 124 p. Order No. AD-650 034. \$3.

Joss: Disc File System. Rand Corp., for the Air Force, Feb. 1967, 41 p. Order No. AD-650 128. \$3.

Nondestructive Readout from Thin Magnetic Films. Naval Air Development Center, Johnsville, Pa., Jan. 1967, 45 p. Order No. AD-647 247. \$3.

Introduction to the Theory and Applications of the Remapper. Technion-Israel Institute of Technology, Haifa, Israel, for the Air Force, Aug. 1965, 65 p. Order No. AD-650 718. \$3.

Preliminary User's Guide to Monitor 1. Mitre Corp., Bedford, Mass., for the Air Force, Dec. 1966, 55 p. Order No. AD-649 754. \$3.

Vital Compiler-Compiler System Reference Manual. MIT Lincoln Laboratory, Lexington, Mass., for the Air Force, Feb. 1967, 83 p. Order No. AD-649 140. \$3.

Preliminary Development of a Solid State Matrix Display. RCA, for the Air Force, Jan. 1967, 168 p. Order No. AD-649 553. \$3.

Multiprocessor Operating Systems. Naval Research Laboratory, Washington, D.C., April 1967, 33 p. Order No. AD-651 707. \$3.

Operational Low-Power, Low-To High-Frequency Digital Circuit Elements: Refinements, Characteristics and Developments. MIT Lincoln Laboratory, Lexington, Mass., for the Air Force, Jan. 1967, 78 p. Order No. AD-650 779. \$3.

Project MAC Progress Report III, July 1965 to July 1966. MIT, for the Advanced Research Projects Agency, 1966, 306 p. Order No. AD-648 346. \$3.

Design of a Program Linkage and Communication Mechanism for the GE 645 Computer System. Air Force Systems Command, Jan. 1967, 41 p. Order No. AD-647 258. \$3.

The Structure of a Lisp System Using Two-Level Storage. Bolt Beranek and Newman, Inc., Cambridge, Mass., for the Air Force, Nov. 1966, 26 p. Order No. AD-647 601. \$3.

An Introduction to TAB40: A Processor for Table-Written Fortran IV Programs. Research Analysis Corp., McLean, Va., for the Army, Nov. 1966, 46 p. Order No. AD-647 418. \$3.

Design Principles for an On-Line Information Retrieval System. University of Pennsylvania, for the Air Force, Dec. 1966, 136 p. Order No. AD-647 196. \$3.

Computer Design for Asynchronously Reproducible Multiprocessing. MIT, for the Navy, Nov. 1966, 254 p. Order No. AD-650 407. \$3.

Construction of Vacuum-Formed Control and Display Mockup Panels. IBM, for the Air Force, Nov. 1966, 53 p. Order No. AD-648 519. \$3.

Nitrogen-Phosphorus Polymers. University of Heidelberg, Germany, for the Air Force, Nov. 1966, 42 p. Order No. AD-651 752. \$3.

Encapsulation of Electronic Parts

in Plastics, A Review. Picatinny Arsenal, Dover, N.J., Feb. 1967, 67 p. Order No. AD-648 420. \$3.

Trade Designations of Plastics and Related Materials. Picatinny Arsenal, Dover, N.J., Dec. 1965, 198 p. Order No. AD-481 788. \$3.

Studies on the High Temperature Oxidation of Molybdenum, Tungsten, Niobium, Tantalum, Titanium, and Zirconium. Westinghouse Electric Corp., Pittsburgh, Pa., for the Army, April 1967, 69 p. Order No. AD-650 638. \$3.

Diffusion Bonding of Titanium Alloys. Atomics International, Canoga Park, Calif., for the Army, Sept. 1966, 29 p. Order No. AD-647 849. \$3.

The Plastic Deformation of Manganese. University of Michigan, for the Army, Feb. 1967, 102 p. Order No. AD-650 746. \$3.

Torque Test for Evaluating the Quality of Aluminum Alloy Melts. Frankford Arsenal, Philadelphia, Pa., Dec. 1966, 40 p. Order No. AD-648 486. \$3.

Oxidation of Nickel and Nickel-Cobalt Dispersion Strengthened Alloys. Watervliet Arsenal, N.Y., March 1966, 37 p. Order No. AD-482 191. \$3.

A Diffusion Bonding Program. Honeywell, Inc., for the Air Force, April 1967, 51 p. Order No. AD-651 545. \$3.

DEFENSE PROCUREMENT CIRCULARS

Distribution of Defense Procurement Circulars is made automatically by the U.S. Government Printing Office to subscribers of the Armed Services Procurement Regulation (ASPR).

Defense Procurement Circular No. 55, Sept. 28, 1967. (1) Contractor Submissions of Cost or Pricing Data. (2) Addition to ASPR Manual for Contract Pricing. (3) Shipment from the United States for Overseas Delivery. (4) Value Engineering. (5) Small Business Size Standards. (6) ASPR Section XXI, Parts 1 and 2. (7) Ceiling for Progress Payments on Incentive Contracts.

SELECTED DEFENSE DEPARTMENT ECONOMIC INDICATORS

(DOLLARS IN MILLIONS; MANPOWER IN THOUSANDS; QUARTERS BY CALENDAR YEAR)

	1966	1967				May	Jun	II	Jul	Aug
	I	II	III	IV	I	Apr	Jun	II	Jul	Aug
<i>I. Military Prime Contract Awards</i>										
Aircraft	\$ 1,945	\$ 2,989	\$ 2,696	\$ 2,262	\$ 2,102	\$ 432	\$ 1,377	\$ 3,049	\$ 394	\$ 541 (p)
Missile & Space Systems	1,040	987	1,314	861	1,230	300	606	1,166	535	582 (p)
Ships	355	491	876	239	679	72	206	407	178	175 (p)
Weapons & Ammunition	555	1,486	692	915	818	279	972	1,769	92	416 (p)
Electr. & Communications Eqpt.	918	1,574	666	915	971	480	1,030	1,848	169	318 (p)
Other Hard Goods	843	1,842	660	1,029	915	298	904	1,564	202	332 (p)
Soft Goods	709	922	1,078	989	638	171	282	652	588	277 (p)
Construction	207	392	198	150	232	126	340	626	56	70 (p)
All Other	1,406	1,963	2,356	1,639	1,605	517	963	1,987	1,194	669 (p)
Total (Excl. of work outside U.S.)	7,978	12,646	10,536	9,024	9,190	2,675	6,680	13,068	3,408	3,380 (p)
Total, Seasonally Adjusted	8,703	10,144	10,716	10,149	10,171	2,920	6,626	10,667	3,610	3,727 (b)
Work Outside U.S.	521	1,195	856	672	453	227	379	834	314	342 (p)
<i>II. Gross Obligations Incurred</i>										
Operations	8,326	9,604	10,426	9,702	10,229	3,664	3,531	11,211 (p)		
Procurement	4,374	8,539	5,368	5,276	5,113	1,801	2,485	8,636 (p)		
Other	2,429	3,470	3,453	2,230	2,519	726	1,130	3,487 (p)		
Total	15,129	21,613	19,247	17,208	17,861	6,191	7,146	23,334 (p)		
<i>III. Gross Unpaid Obligations Outstanding</i>										
Operations	3,828	3,777	4,792	5,024	4,644	4,761	4,765	4,543 (p)		
Procurement	18,023	22,119	22,736	23,173	22,780	22,613	22,947	24,886 (p)		
Other	5,747	7,392	8,179	7,888	7,626	7,453	7,628	8,354 (p)		
Total	27,598	33,288	35,707	36,085	35,050	34,827	35,340	37,783 (p)		
<i>IV. Net Expenditures</i>										
Operations	7,689	9,076	8,968	9,087	10,002	3,416	3,335	10,496 (p)	2,898 (p)	3,722 (p)
Procurement	3,651	3,886	4,392	4,264	5,074	1,783	1,850	5,335 (p)	2,037 (p)	1,982 (p)
Other	2,757	2,647	2,484	3,092	3,179	918	749	2,066 (p)	1,231 (p)	881 (p)
Total	14,097	15,609	15,844	16,443	18,255	6,117	5,934	17,897 (p)	6,166 (p)	6,585 (p)
<i>V. DOD Personal Compensation</i>										
Military	3,181	3,249	3,551	3,606	3,624	1,230	1,196	3,653 (p)		
Civilian	1,937	2,015	2,105	2,135	2,163	700	776	2,242 (p)	724 (p)	791 (p)
Total	5,118	5,264	5,656	5,741	5,787	1,930	1,972	5,895 (p)		
<i>VI. Outstanding Payments</i>										
Advance Payments	66	79	90	83	92			80		
Progress Payments	4,402	4,346	4,750	5,461	5,981			6,765		
Total	4,468	4,425	4,840	5,544	6,073			6,845		
<i>VII. Strength (Manpower)</i>										
Military	2,969	3,094	3,229	3,334	3,371	3,371	3,368	3,377	3,382	3,393 (p)
Civilian	1,088	1,138	1,184	1,230	1,268	1,273	1,274	1,303	1,311	1,308 (p)

p—preliminary

NOTE: Open spaces for indicators other than No. VI indicate information not available at time of publication. Indicator No. VI information available only on a quarterly basis.

Directorate for Statistical Services
OASD (Comptroller)
28 September 1967



ABOUT PEOPLE

DEPARTMENT OF DEFENSE

Appointment of Maj. Gen. William H. Prentice, USAR, to a three-year term as a member of the Reserve Forces Policy Board has been announced.

RAdm. William E. Kuntz, USN, has been assigned as Asst. Dep. Dir., Defense Communications Systems Operations, Defense Communications Agency. He succeeds RAdm. John R. Wadleigh, USN.

Brig. Gen. I. R. Obenchain Jr., USA, has been assigned as Asst. Dep. Manager, National Communications System, Defense Communications Agency.

Col. Jean E. Crabtree, USAF, has succeeded Capt. E. E. Johnson, USN, as Staff Director of Installations and Services, Headquarters, Defense Supply Agency.

Col. Hugh B. Mitchell, USAF, has relieved Capt. Joseph S. Burkle, USN, as Dir., Armed Forces Radiobiology Research Institute, Bethesda, Md.

DEPARTMENT OF THE ARMY

Brig. Gen. Wendell J. Coats has been appointed Dep. Chief of Information, Office of the Chief of Information. He succeeds Brig. Gen. Lloyd B. Ramsey who has served as Dep. Chief since March 1966.

Col. Paul R. Cerar has succeeded Brig. Gen. William W. Stone Jr., as Commander of Edgewood Arsenal, Md.

Dr. Charles A. Reynolds, professor of chemistry at the University of Kansas, has been named as Edgewood Arsenal's first Technical Director.

Col. Edward G. Anderson Jr. has assumed duties as Commanding Officer, U.S. Army Engineer Topographic Laboratories, Fort Belvoir, Va. He succeeds Col. H. W. Fish, who has retired.

Col. John R. M. Covert has been selected the Project Manager for the Army's Redeye guided missile system at Redstone Arsenal, Ala.

DEPARTMENT OF THE NAVY

RAdm. Ernest W. Dobie Jr., has been assigned as Dep. Dir., Anti-Submarine Warfare Programs, Office of the Chief of Naval Operations. Re-

lieving Adm. Dobie as Dir., Undersea Warfare and Ocean Surveillance Div., Office of the Chief of Naval Operations, will be Capt. Parker B. Armstrong, who has been selected for promotion to the rank of rear admiral.

RAdm. Allan F. Fleming has been named Asst. Dep. Chief of Naval Operations (Plans and Policy).

RAdm. Vincent P. De Poix has been named Asst. Dep. Chief of Naval Operations (Development).

RAdm. John W. Dolan Jr., Commander of Long Beach Naval Shipyard, Long Beach, Calif., since December 1965, has been relieved by Capt. C. Monroe Hart. Capt. Hart comes to the new post from duty as Industrial Control Officer, San Francisco Bay Naval Shipyard, Mare Island Div.

Capt. Colin J. Ricketts has assumed command of the Naval Missile Center, Point Mugu, Calif., relieving Capt. Carl O. Holmquist.

DEPARTMENT OF THE AIR FORCE

Thomas H. Nielsen has been nominated by President Johnson to succeed Leonard Marks Jr. as Asst. Secretary of the Air Force (Financial Management).

Maj. Gen. Ernest A. Pinson has been selected to serve as Commandant of the Air University's Air Force Institute of Technology, Wright-Patterson AFB, Ohio. He takes command on Nov. 1.

Maj. Gen. Lawrence F. Tanberg has been named Dir. of Maintenance Engineering, Office of the Dep. Chief of Staff (Systems and Logistics), at USAF headquarters.

Maj. Gen. John L. McCoy has been reassigned as Dir. of Plans and Programs, Air Force Logistics Command, Wright-Patterson AFB, Ohio.

Brig. Gen. Franklin A. Nichols has been named Commander, Ground Electronics Engineering Installation Agency, Air Force Logistics Command, Griffiss AFB, N.Y.

Brig. Gen. William F. Pitts has been ordered to duty at USAF headquarters to serve as Dep. Dir. of Budget, Office of the Comptroller of the Air Force.

Col. Clyde S. Cherry has assumed duties as Dir. of Systems Test, Air Force Flight Test Center, Edwards AFB, Calif.

Col. Martin K. Newland has been assigned as Chief of the Minuteman Missile Division, Materiel Management Directorate, at Ogden Air Materiel Area, (AFLC), Hill AFB, Utah.

Col. Walter K. Rickert has become Dir. of Nuclear Field Operations, at Kirtland AFB, N.M. He relieved Col. James T. Corn, who has gone to AFSC headquarters to serve as Dep. Dir., Test Operations, in the Office of the Dep. Chief of Staff (Operations).

Col. William A. Walker has been named Chief, Propulsion Subsystems Div., Dep. for Subsystems and Equipment Management, Aeronautical Systems, Div., (AFSC), Wright-Patterson AFB, Ohio. He succeeded Col. Hal W. Everett, who has retired.

SPCC Given Role in Navy's Deep Submergence Program

The Ships Parts Control Center (SPCC), Mechanicsburg, Pa., will play an important role in one of the Navy's newest programs—the Deep Submergence Systems Program (DSSP)—which is designed to meet the Navy's increasing need for oceanographic research.

Acting through the Special Projects Office, the Program Branch, Weapons Systems Coordination Division, of the center will work with DSSP to ensure that equipment installed in newly developed oceanography vehicles is backed up by adequate spare and repair parts.

Part of the SPCC mission will be to assist DSSP in identifying the different kinds of parts required, deciding how many of each are needed, and compiling information for inclusion in catalog and allowance lists.

Preparation of instructions governing the delivery of support items and formalization of contracts for the procurement of spare and repair parts and special tools will also be SPCC's responsibility.

OFFICE OF INFORMATION OFFICE OF THE SECRETARY Washington

SPECIAL ASSISTANT TO DIRECTOR
MAJ Donald E. Burggrave 4D 922 59156

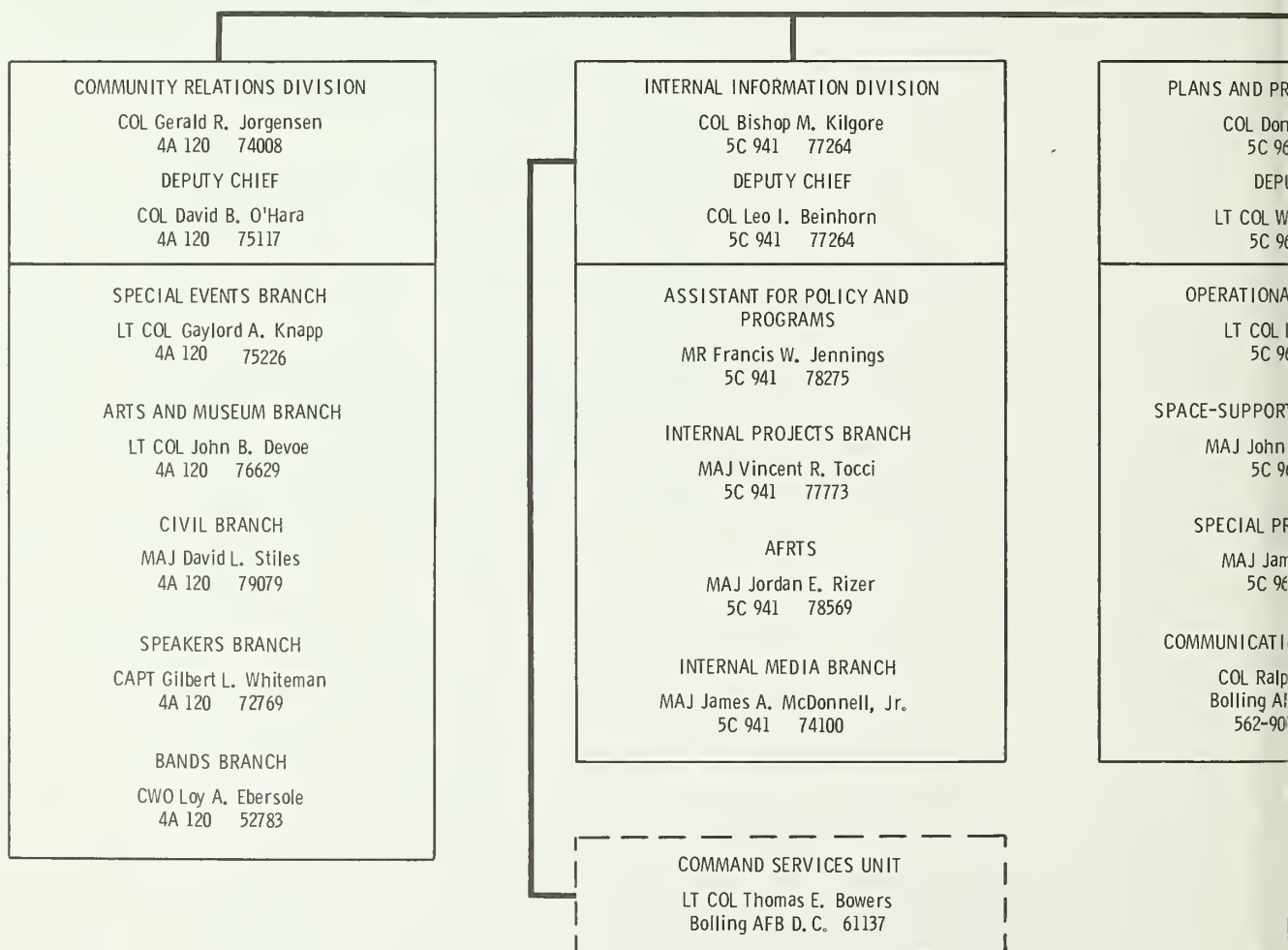
DIRECTOR
MAJ GEN William C. ...

DEPUTY DIRECTOR
BRIG GEN James F. Ha...

ASSISTANT DIRECTOR
COL Mark H. Gilman 4D 922 74259

EX...
LT COL Donald L. S...

Office of Information is located
in the Pentagon, Washington, D. C.
Telephone: Area Code 202, OXford plus number listed.



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NFORMATION

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4D 922 55227

ASSISTANT DIRECTOR
COL Max B. Boyd 4D 922 54602

IS DIVISION

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UDIES GROUP

ne, Jr.
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4167

PUBLIC INFORMATION DIVISION

COL Herbert L. Wurth
4C 922 55554

DEPUTY CHIEF

LT COL Milton K. Kegley
4C 922 73328

OPERATIONS BRANCH

LT COL Harold A. Susskind
4C 922 55809

PROJECTS DEVELOPMENT BRANCH

LT COL Carl G. Arnold
4C 922 77817

OFFICE FOR SECURITY REVIEW

MR Flint O. DuPre
5C-924 73222

DEPUTY CHIEF

LT COL Nicholas J. Kasun, Jr.
5C 924 79542

MID-WEST OFC OF INFO

COL Ralph R. Springer
219 S. Dearborn
Chicago, Ill. 60604
(312) 353-5151

LOS ANGELES OFC OF INFO

COL George Schenkein
6087 Sunset Blvd.
Hollywood, Calif. 90028
(213) 688-2579

NEW YORK OFC OF INFO

COL C. B. Whitehead
633 5th Ave.
New York, N. Y. 10022
(212) 753-5609



MEETINGS AND SYMPOSIA

NOVEMBER

1967 Conference on Speech Communication and Processing, Nov. 6-8, at Boston, Mass. Co-sponsors: Air Force Cambridge Research Laboratories and the Institute of Electrical and Electronics Engineers. Contact: C. P. Smith, (CRBS), Air Force Cambridge Research Laboratories, L. G. Hanscom Field, Mass. 01730, Phone (617) 274-6100, Ext. 3712.

Applied Superconductivity Conference, Nov. 6-8, at Austin, Tex. Sponsors: Army Research Office, University of Texas, NASA, Air Force Office of Scientific Research and the Office of Naval Research. Contact: W. H. Hartwig, Electronic Materials Research Laboratory, University of Texas, Austin, Tex. 78712; or Lt. Col. R. B. Kalisch, (SREE), Air Force Office of Scientific Research, 1400 Wilson Blvd., Arlington, Va. 22209, Phone (202) OXford 4-5518.

Tenth Navy-Industry Conference on Systems Effectiveness, Nov. 8-9, at Washington, D.C. Sponsor: Naval Air Systems Command. Contact: Executive Secretary, Naval Air Systems Effectiveness Advisory Board, Code AIR-5205A, Naval Air Systems Command, Washington, D.C. 20360, Phone (202) OXford 6-5284.

Navy Electronic Systems Classified Briefing (Secret), Nov. 14-16, at the U.S. Navy Amphibious Base, Coronado, Calif. Sponsor: Electronic Industries Assn. Contact: Electronic Industries Assn., 2001 Eye St., NW, Washington, D.C. 20006, Phone (202) 659-2200.

Decomposition of Organo Metallic Compounds to Refractory Ceramics Metals and Metal Alloys Conference, Nov. 28-30, at the Sheraton-Dayton Hotel, Dayton, Ohio. Sponsor: Air Force Materials Laboratory. Contact: Dr. Lynch, (MAMC), Air Force Materials Laboratory, Wright-Patterson AFB, Ohio 45433, Phone (513) 253-7111, Ext. 54145.

Sixteenth Annual Wire and Cable

Symposium, Nov. 29-Dec. 1, at the Shelburne Hotel, Atlantic City, N.J. Sponsor: Army Electronics Command. Contact: Milton Tenzer, Electronic Parts and Materials Div., Electronic Component Lab., Army Electronics Command, Fort Monmouth, N.J. 07703, Phone (201) 535-1834.

DECEMBER

Theory of Measurement of Atmospheric Turbulence Conference, Dec. 5-7, at Sandia Base, Albuquerque, N.M. Co-sponsors: Army Electronics Command and Sandia Corp. Contact: Marvin Diamond, Atmospheric Sciences Office, Atmospheric Sciences Laboratory, Army Electronics Command, White Sands Missile Range, N.M. 88002, Phone (505) 338-1006.

Industry-Defense Meeting, "Industry Responds to National Emergency," Dec. 7, at the Waldorf-Astoria Hotel, New York, N.Y. Co-sponsors: American Ordnance Assn., Eastern and Northeast Chapters. Contact: John S.

Pink, American Ordnance Assn., 207 W. 24th St., New York, N.Y. 10011, Phone (212) OR 7-3030, Ext. 700.

JANUARY

Seminar on Strain Gage Techniques, Jan. 8-12, 1968, at the University of Miami, Coral Gables, Fla. Sponsors: Mechanical Engineering Department of the School of Engineering and the Division of Continuing Education, University of Miami and the Society for Experimental Stress Analysis. Contact: Director, Professional Education, Division of Continuing Education, P.O. Box 8005, University of Miami, Coral Gables, Fla. 33124.

Conference on Methodologies of Pattern Recognition, Jan. 24-26, 1968, at the University of Hawaii, Honolulu, Hawaii. Sponsor: Office of Aerospace Research. Contact: Mrs. R. W. Swanson, Air Force Office of Scientific Research, (SRI), 1400 Wilson Blvd., Arlington, Va. 22209, Phone (202) OX 4-5407.

Army Security Film Available

"The Smile and the Sword," the ninth in a series of industrial security films, has been distributed to U.S. Army Audio-Visual Support Centers for redistribution on a loan basis.

The 20-minute, black and white film (DODIS-9) is based on J. Edgar Hoover's article, "The American Businessman Faces the Soviet Spy," which appeared in the Harvard Business Review. The picture portrays a foreign agent's attempts to dupe an American businessman into an espionage scheme.

Requests for "The Smile and the Sword" should be submitted to the Director, U.S. Army Audio-Visual

Support Center, at any of the following addresses:

Fort George G. Meade, Md. 20755
Frankford Arsenal, Philadelphia, Pa. 19137

Sixth Army, Presidio of San Francisco, Calif. 92129

Fort Wadsworth, N.Y. 11252

Fort McPherson, Atlanta, Ga. 30330

Fort Sheridan, Ill. 60038

St. Louis Area Support Center, 12th & Spruce St., St. Louis, Mo. 63103

U.S. Army Tank Automotive Command, Warren, Mich. 43090

Fort Sam Houston, San Antonio, Tex. 78234

Army Support Detachment, Oakdale, Pa. 15071

Fort MacArthur, Calif. 90731

ASPR Committee Case Listing

The following is a listing (revised as of Aug. 29, 1967) of the cases currently under consideration by the Armed Services Procurement Regulation (ASPR) Committee, of the Office of the Assistant Secretary of Defense (Installations and Logistics).

On items marked by asterisks, the text has been omitted to shorten the listing. The asterisks denote actions taken as shown below:

**—Case closed, no ASPR revisions resulting.*

***—Case closed, approved for printing in a subsequent ASPR revision.*

****—Case closed, approved for printing subject to further government coordination.*

The listing includes subjects of interest to contractors but excludes cases of a minor or editorial nature, those considered sensitive, and those involving a deviation from the regulation which are processed by the ASPR Committee.

The ASPR Committee meets with representatives of major industry associations periodically to explain the purpose and status of each of the cases under consideration, and to answer questions from industry representatives concerning the cases. All proposed ASPR changes of major policy are forwarded to industry associations in draft form for the review and comments of the association memberships. Industry comments are evaluated by the Defense Department before a final decision on the proposal is made by the ASPR Committee.

ments, has been prepared. The question of establishment of a "dollar floor" below which the facilities acquisition clause would not be used is still under consideration.

*** DOD Ship Repair Contract Manual.**

**** DOD Policy on Furnishing Components, Subsystems, etc., to Contractors.**

Rental Charges for Use of Government Property. To consider whether the adoption of a policy of charging rent for use of government property, across the board, would be more practical and less burdensome in assuring against competitive advantages, and would result in a decline in the number of requests for use of government property generally. No definitive action has been taken on the numerous proposed solutions to this matter. The problem is still under consideration.

**** Value Engineering—Incorporation of Defense Procurement Circulars No. 11 and No. 19 in the ASPR.**

**** Air Force Procurement Circular No. 6.**

Industry Cost Sharing. To consider revising the ASPR policy contained in 4-208, on industry cost sharing in connection with sales to foreign governments, to provide additional policy guidance for use in situations when the potential domestic and foreign commercial sales of the contractor appear to be very substantial and provisions for cost recovery of development expenses by the Government may be appropriate.

*** DOD Contract Clause Book.**

Cost Principle—Depreciation. To review the depreciation guidelines and rules, issued by new Revenue Procedures 65-13, and to prepare appropriate changes to ASPR 15-205.9 which may be necessary as a result of Revenue Procedures 65-13, issued by the Internal Revenue Service. A subcommittee report, after considering industry comments, has been considered and returned to the subcommittee for further redrafting. A revised subcommittee report has been received and will be considered in the near future.

**** Proposed Addition to ASPR on Procurement of Privately Developed Items.**

Environmental Pollution Control. To consider the development of contrac-

tual coverage to implement Executive Order 11258 with respect to prevention, control and abatement of water pollution by Federal activities, and to assure that the standards established for direct Federal operations are adhered to by contractors under programs financed by the Government. This matter is still under consideration by the subcommittee in conjunction with other government agencies.

Patent Costs. To consider the recommendations of the Defense Industry Advisory Council Working Group that ASPR 15-205.26, covering patent costs, be clarified in view of the varying interpretations of the present cost principles. A proposed revision of the patent cost principle was forwarded to industry for comment of March 6, 1967. Industry comments have been received and considered. A revised subcommittee report, based upon the comments received from industry, has been presented. This matter will be considered by the ASPR Committee in the near future.

Source Selection Procedures. To consider the development of coverage for inclusion in the ASPR with respect to the selection of sources, both in research and development contracts and in production contracts which are not awarded on the basis of price competition.

Equal Employment Opportunity. To develop implementation of the Department of Labor proposed revised rules with respect to the subject matter. This matter is currently under consideration by a special subcommittee.

*** Paperwork Burden on Defense Contractors.**

Review of the Implementation of Public Law 87-653. To undertake a review of the ASPR implementation of Public Law 87-653 in depth, on the basis of the experience thus far obtained, to determine the need for further guidance or clarification of such coverage. This review has been divided into five broad areas as follows:

- The submission of data. When is data submitted? Submission vs. disclosure or availability. Identification of data. Contracting officer (and other) documentation.

- Definitions of "current" and "complete." From the standpoint of

Industrial Equipment Modernization and Replacement Program. To consider developing a contractual requirement for the determination of savings resulting from the DOD industrial equipment modernization or replacement programs for inclusion in the ASPR. Proposed ASPR text and a contract clause for use in fixed-price contracts to accomplish the foregoing have been developed and commented on by industry. Revised coverage, based on review of industry com-

reasonableness and practicability. How should significance be considered?

- **Examination of Records.** Audit before negotiation. Audit after contract award. Audit of subcontractor data.

- **Subcontract Problems.** Subcontracts under firm fixed-price primes. Second and third tier subcontracts.

- **Significance.** From the standpoint of price negotiation vs. application of defective pricing clause. Price changes after price agreement but before contract award.

As a result of the comments previously received from industry, the committee has completed its efforts in revising the clauses implementing Public Law 87-653. However, because of the foregoing review, publication of the clause changes is being withheld. The material developed under this matter was forwarded to industry for comment on June 9. The comments received are currently under consideration.

Relocation Costs, ASPR 15-205.25. To consider revising ASPR 15-205.25, covering relocation costs, to specifically set forth therein guidance to government auditors and contracting officials in the treatment to be afforded the cost of maintaining unsold homes of contractors' employees, who transfer to new locations to work under government contracts. Industry comments on the proposed clarification have been received and are being considered.

Cost Information Reports (CIR). To develop appropriate implementation of Cost Information Reports, covered in DOD Directive 7041.2, entitled "Cost Information Reports," and the DOD Handbook entitled, "Cost Information Reports (CIR) for Aircraft, Missiles and Space Systems," for inclusions in the ASPR. An initial draft of ASPR coverage was considered early in July and returned to the subcommittee for revision. A revised report has not been received to date.

Contract Modifications. To develop a new ASPR section consolidating service material dealing with all types of contract modifications. Consideration of this subject is continuing.

Assignment of Contracts for Administration. To prepare procedures for uniform assignment of contracts to the cognizant contract administration office, and to outline the principal responsibilities of contract administration

offices. Consideration of this case continues with publication expected early in calendar year 1968.

Handbook for Procurement Quality Assurance. To prepare an ASPR supplement which will provide standardized procedures, when possible, for use of government inspection and quality assurance personnel. The case has been returned to the subcommittee for further development.

Contractor Utilization of Industrial Production Equipment. To prepare procedures which will require an active government program to assure that government-furnished industrial production equipment in possession of contractors is being effectively utilized. Industry comments on the draft of the proposed part are being evaluated.

Production Surveillance and Reporting. To prepare the initial parts of a new ASPR section dealing with the production function. This effort is confined to the activities of government personnel in determining the status of progress on government contracts and the reporting of the status, as required. A revised subcommittee report is being evaluated.

Transportation. To develop a new ASPR Section XIX, covering transportation, by expanding the existing Section I, Part 13, coverage to incorporate therein existing service material and, thereby, provide comprehensive guidance, including necessary contract clauses and provisions. Industry comments have been evaluated and publication is expected shortly.

**** Public Law 89-487—Freedom of Information.**

**** Organizational Conflict of Interest.**

Health and Safety Clauses. To develop uniform health and safety clauses for inclusion in the ASPR, with a view to recession of the existing departmental safety and accident rules and regulatory manual which contain health and safety clauses.

**** Letter Contracts.**

Architect-Engineer and Construction Contracts. To develop additional ASPR coverage for construction and architect-engineering procurement, based on regulatory material contained in implementation of the ASPR by the Military Departments. Industry comments on the proposed coverage have been received and are under consideration.

Communications Services. Develop-

ment of uniform ASPR coverage which would permit deletion of existing departmental coverage with respect to procurement of communication services from both regulated and non-regulated suppliers. Industry comments have been received, considered, and revised coverage developed. The coverage will be considered by the committee in the near future.

*** Consideration of NASA Instant Licensing Procedures.**

Cost-Plus-Award Fee Contracts. To determine whether cost-plus-award fee contracts, for use in situations requiring a level of effort (by excluding contracts for hardware development), should be set forth in the ASPR as an authorized type of contract. This matter is still under consideration.

Advance Understanding of Allowability, ASPR 15-107. To revise the existing ASPR paragraph to explicitly provide that such agreements must be in writing to be binding on the Government. This subject is still in the process of being developed.

*** Minimum Discount Period for Bid Evaluation.**

Disposition of Contractor Inventory. To develop a new ASPR Section XXIV providing procedures for disposal of excess government property in possession of contractors. Industry comments on the proposed section have been evaluated and publication is expected shortly.

Compensation Review. To determine what actions on the part of the Government are necessary to assure that compensation paid to contractor employees performing on government contracts is reasonable. This case is presently being considered by a CAP Subcommittee.

DOD Policy on "Buying In." To revise the existing policy statement on "buying in," contained in ASPR 1-311, to clarify the basic policy statement by appropriate cross reference to the portions of the ASPR having an important bearing on implementation of the policy, thus achieving a better understanding of the policy, procedures and action available to the Government to avoid buying in.

Time Limitations on Contract Claims. To consider whether there is a need for imposing additional contractual time limits on contract claims against the Government in light of the recent decisions—Crown Coat Front Co., Inc., vs. United States

(Continued on Page 32)



FROM THE SPEAKERS ROSTRUM

Address by Hon. Thomas E. Morris, Asst. Secretary of Defense (Installations and Logistics), at the DOD Value Engineering In-House Conference, Washington, D. C., Sept. 12, 1967.

Value Engineering Can Solve Cost Problems

... My fundamental responsibility as the Assistant Secretary of Defense (Installations and Logistics) is to see that our combat forces receive the materiel support they need. The vital significance of our responsibility to provide materiel support to our combat forces comes into sharper focus when we are committed in actual combat, as is the case in Vietnam today. Materiel support must satisfy certain basic criteria:

- Materiel must satisfy all aspects of military operation requirements.
- Materiel must meet required standards of quality and reliability.
- Materiel must be delivered to the place of need, at the time of need, and in the required quantities.

The extended period of cold and hot war that we have encountered since World War II illuminates another important responsibility that we share. This responsibility is to provide the materiel support to our forces at the lowest possible cost of effective ownership. By "lowest cost of effective ownership" I don't necessarily mean lowest initial cost, but a lower overall cost of acquiring, operating and supporting weapons and equipment over their useful life. The President and the Secretary of Defense insist that we obtain value from our defense budget. The Congress keeps a close eye on our efforts in this regard. And, finally, we owe it to the nation and to ourselves as taxpayers to get the most out of the resources placed under our stewardship.

Often it is said that cost effectiveness is just routine good manage-

ment. The inference is that if we concentrate on meeting specification requirements and delivery schedules, optimum costs will automatically result. Experience proves that this rationalization does not tell the whole story. We must also have an organized and disciplined procedure, designed to assure that we are cost effective in meeting performance and schedule requirements. Management emphasis on achieving valid performance requirements and meeting schedules must continue. We must also assure a third area of management emphasis—we must assure that we have an effective overt effort which is designed and implemented to assure that performance and schedule requirements are met at the lowest possible cost for acquisition, operation and support.

The purpose of the Cost Reduction Program is to achieve economy in managing the expenditures and resources of the Defense Department. This program establishes cost reduction goals, measures performance against these goals and, thus, provides a broad measure of our cost effectiveness. As a motivational program, strongly emphasized by the highest levels in DOD, and by the President himself, the Cost Reduction Program assures that the economic aspects of our management task receive widespread attention.

The Value Engineering Program supplements the Cost Reduction Pro-

gram. Value engineering provides an organized, conscious and formally identified effort for managers to use on a continuing basis. It is a discipline particularly suitable for continuing use at the operating level. It is a value management technique for use in project offices, buying divisions, logistic support management divisions, and in the functions that contribute to these management efforts. Value engineering is akin to scientific problem-solving techniques which have proven successful in solving military problems and hardware design problems.

Value engineering—or value analysis, if you wish—has these distinctive features:

- It doesn't ask a design engineer to sacrifice valid performance requirements.
- It doesn't ask the logisticians to sacrifice valid supportability, maintainability, or transportability features.
- It maintains or improves safety, quality and reliability requirements.

We have seen enough results to know that value engineering can successfully solve cost problems. Significant value engineering savings have been realized in all phases of our projects from beginning to end—from ammunition to paperwork, from missile and space projects to repair procedures on equipment that has been in the inventory for 10 or more years.

Here are three relatively simple and handy examples of value engineering improvements. These examples have the added virtue of illustrating that value engineering may improve items supplied to our combat forces in Vietnam as well as decreasing their cost.

- A value engineered design change of the motor case of an aircraft rocket eliminated three component parts. This value improvement also improved by 40 percent the reliability of this high usage rate rocket. Safety and producibility characteristics were improved. This value engineering action reduced the unit cost of the rocket motor by over 30 percent.



Hon. Thomas E. Morris

• A value engineering project on the anti-personnel bomblet developed several design changes that can be made to reduce its cost. These changes will not impair the function of the item. This crimp band is now being cut from standard steel tubing. Before it was a specially formed part. This small value engineering change alone will save over \$1 million.

• The next example is a value engineering action on the universal rifle case. Formerly, the universal rifle case was a zippered bag used to retain a rifle on a service vehicle. The value engineering action substituted a bracket at a lower cost. The action resulted in savings of \$551 thousand as well as provided quicker access to the weapon.

Many value engineering illustrations could be cited which save money, meet operational needs, and improve other characteristics such as reliability, producibility and safety. These successful value engineering actions are considered by many to be just good common sense. I agree that they are good common sense. We need more of it. Value engineering is a systematic technique to apply common sense to get the function satisfied at lower cost and, as experience shows, usually it improves other characteristics also.

The most significant thing about these three examples is that the value engineering effort was made. Someone actively sought a way to satisfy a requirement at a lower cost. Having actively sought a way to do the job at a lower cost, they found it, and also found ways to improve other aspects of their management task.

More Effort Needed in VECP Activity

Unfortunately, value engineering change proposal (VECP) data indicates that an effective value engineering effort is not being made on some of our programs. A recent review of the VECP activity of 34 of our largest defense contractors shows considerable disparity. Eight of the 34 didn't submit a single high dollar VECP (estimated value of \$50,000 or more before sharing). Substantial results, however, were

produced by several of these contractors. For example, eight of the 34 each produced estimated savings to DOD of over \$1 million from approved VECPs. The VECP savings to us from each of these eight contractors ranged from \$1 million to \$5 million.

Incidentally the contractor that produced \$5 million in VECP savings to DOD, last year had less sales to DOD than 15 or so other contractors. The dollar value of his contracts with the Army, Navy and Air Force in FY 1966 was approximately one-tenth that of the contractors cited earlier, who didn't produce a single successful high dollar VECP.

I don't infer that the larger contractors are not active in value engineering. In fact, some of our largest contractors are among these eight producing VECP savings to DOD of over a million dollars.

The findings of the Logistics Management Institute survey, analysis of VECP data, and other information lead to a conclusion that value engineering is not being effectively used on some programs. Why is this so?

Probably a number of reasons—or excuses—could be given. Substantial evidence indicates that some of our principal managers have not included value engineering as an integral part of their responsibility. Furthermore, the attention given to value engineering by principals in DOD rubs off on counterparts in industry. One of Webster's definitions of "principal" is "the person primarily responsible for an obligation." I am using "principal" to describe the program manager, the engineer, the project officer, the procurement officer, the maintenance technician, the supply technician, etc.—those who have a direct contributing task in the acquisition and support of DOD materiel.

Some of these principals and their counterparts in industry may have tended to think of value engineering as being solely in the purview of a special functionary. This special functionary, the Value Engineering Office, Value Analysis Office, or Value Control Office—whatever the title—may even be considered by some to be a meddlesome burden whose sole reason for being is to satisfy the whims of Washington. Fortunately, there is evidence that this extreme may be on the wane.

The greatest progress appears to have been made in those programs and activities where the principals on the DOD side of the house have become informed on the DOD Value Engineering Program, have visualized its potential, and have assimilated value engineering into their job responsibilities.

We have noted the initiative taken by the Departments of the Army, Navy and Air Force, and the Defense Supply Agency, at the Washington level, to spur the value engineering accomplishments in their Departments. We have observed that these initiatives have achieved noteworthy results. But we have also learned that all principals in program offices and buying activities have not received these "transmissions" or, if received, have not interpreted them to be of continuing concern. There may have been an inclination on the part of some to consider them an annual drive that can be forgotten until next year.

At the more favorable end of the spectrum we have learned of a case where program office personnel have exercised initiative to establish communication, understanding and a healthy rapport within the Department and with contractors, specifically on the administration of the Value Engineering Program on their contracts. We would like to learn of more and more examples where our managers are including value engineering as a normal part of their management process; that more and more productive value engineering efforts are being made by the DOD component activities and by their contractors.

What is the Job of the Value Engineer?

I have stressed the importance of principals becoming personally involved in the Value Engineering Program. You may be wondering what is the job of the value engineer—the man occupying a value engineering position? Several years ago we recognized that a small staff should be provided to assist our managers in initiating and sustaining value engineering on their programs and projects. The Secretary of Defense authorized 265 additional manpower spaces for this purpose. After this

augmentation there are still less than 500 full-time value engineering spaces authorized in all of the Army, Navy, Air Force, and the Defense Supply Agency.

Let me emphasize that it is our intent that these value engineers be used to assist the principals to sustain a productive value engineering effort. They are provided to give the managers someone to guide and coordinate the effort of the principals concerned in finding better cost solutions, and assist them in their effort to be more cost effective managers. This value engineering capability is provided as a catalyst to speed the realization of better cost solutions. The value engineer is not just a convenient pair of shoulders to accept the "cost effective element" of the principal's management responsibility. If we endorsed a concept of establishing the value engineering organization to be responsible for the value of the job, we would, among other disadvantages, divide responsibility and duplicate manning requirements. To expect a value engineering organization to relieve the manager of his responsibility for cost effective management is just not logical nor practical. In the past few years I have acquired some appreciation for the DOD manpower picture. I assure you that we cannot afford the luxury of two men to do one man's job. . . .

Most of us recognize that the technological competence and wealth of resources available to our country are unsurpassed in history. An awareness of current events also leads to an inescapable conclusion that our defense programs, non-defense programs, programs to improve the welfare of all our citizens, not to mention the plight of millions of destitute people throughout the world, place huge demands—also unsurpassed in history—on our wealth of resources. If we place these facts in perspective, as they must be at the higher levels of the Government, it quickly becomes apparent that we must strive to get a dollar's worth of value from each dollar expended on our defense programs.

Cost effectiveness, therefore, must be an essential element of our DOD management objectives. I call your attention to the theme of this conference—"How Value Engineering Supports Defense Management Objectives." Value engineering can be

an effective tool for us to use to achieve this essential element of our management, the realization of value. The primary motivating force capable of producing the large value improvements that we seek is managers like yourselves, who are implementing policy and making the many decisions required daily throughout this complex Defense Department. It seems almost unnecessary to say that managers in program offices, procurement activities, engineering, logistics, and contract administration must coordinate with each other, and put full weight behind our value program if we are to capture the large potential value engineering savings we see.

I am confident that value engineering will not only continue, but will become more effective in its support of our defense management objectives. The program, of course, requires continuing and able attention from the highly motivated, competent managers that it is our good fortune to have on our defense team.

Address by Lt. Gen. Charles H. Terhune Jr., USAF, Vice Commander, Air Force Systems Command, to the Seminar for Industry, Air Force Assn. Fall Meeting, Sheraton Park Hotel, Washington, D. C., Sept. 13, 1967.

Management Progressiveness

* * * * *

It used to be said that all roads lead to Rome. In the development and acquisition business, it is hoped that all roads lead eventually to contracts. We write about 7,000 contracts a year in the Air Force Systems Command (AFSC), take about 17,000 funding actions, and engage in more than 275,000 contractual actions of some description. All of the AFSC responsibilities require some sort of government-industry partnership, usually contractual. The success of this partnership depends in turn on the quality of our management.

Over the years we have talked a great deal about the importance of being progressive in our management policies and procedures. This

requirement has not ended, and it never will. However, the issue today is not how much progress we make, but how good that progress is. Like our technical options, our management options have multiplied in recent years. We're surrounded by an abundance of management tools and techniques, all of which have their individual virtues but none of which is suited to every situation.

I don't consider myself a management expert, but after many years in the research and development and systems acquisition business, I do feel I have some management experience. Based on that experience, I'd like to have a few choice words with you today on the nature and direction of our management progressiveness.

The first word is change.

The only thing we can say with absolute certainty about management today is that there are going to be continuing changes. Some of these changes will be functional—we learn how to do things better. However, many others result simply from changing circumstances or changes in the environment in which we operate. Sometimes the manner of doing business changes. We find we must accommodate our management to special objectives and conditions established by higher authority or demanded by national policy. While we've invented or adopted the "ideal" management system many times, we recognize today that no system, no matter how superior, is ever supreme or universally applicable. So in this respect we expect to "stay loose." We're keeping an open mind on management just as we're keeping an open house on technology.

The second word is selectivity.

We can't blame a management system or fault a management technique for failures or deficiencies if we use the wrong one or apply it badly. We have a crying need today to be discriminating, not only in the selection of management processes but in limiting our choices to only what is needed. We can overwhelm a system, and ourselves, through excessive management or through too much management by too many people.

In AFSC, our Management Systems Control Board has taken action

to encourage and support selectivity. One purpose of the board is to insure that no management system is ascribed to a new program arbitrarily or without good cause.

In the past, if a system program director wanted to exempt his program from a directed management system, he had to request a waiver. Under our present approach, the system program office has a direct hand in the selection of the management techniques, and waivers are granted automatically.

The third word in our current management vocabulary is balance.

In recent years, the Air Force has, in effect, co-managed a program with the prime contractor. In many cases we've tried to do a good deal of direct on-the-spot managing. While in certain high-risk programs such joint management practices may persist, there is a growing tendency today toward a new influence—disengagement; disengagement in the sense of dropping many contracting officer or plant representative approval requirements. Air Force item-by-item approval of subcontractors and preliminary and final design reviews are eliminated. We allow the contractor the latitude to run his own business. We advise him of what we need, not how to develop and produce it. This is practical, however, only when we can describe explicitly what the minimum acceptable performance of the system will be. This requires us to do more thorough homework ourselves before we advertise for a new product or capability, and I will touch on the subject later.

I want to be quick to point out that disengagement is not divorce or separation of the Air Force from the contractor without "visiting rights." We must maintain a degree of visibility into the contractor's work—to monitor the progress of the program, to be on the scene in the event changes are required in the contract, and to assure that public funds are being spent wisely. Our goal is a balance between over-control and a complete hands-off attitude. The visibility we seek is intended to fall considerably short of detailed management, microscopic review, or pinpoint control.

Disengagement is possible and visibility of this type is feasible when we

can write contracts that are truly definitive, and this is the fourth choice word.

We've rediscovered that when we take the time to define and cost out our requirements, expressing them in terms of performance specifics in a definitive contract, we stand to get better results than when we plunge ahead in a "crash" program framed in rather fuzzy requirements.

In fact, we're mutually better off when we can define what we want in advance. It may take a little longer in the beginning, but generally the long-run result is fewer changes, more realistic schedules, and lower costs over the run of the contract.

The fifth word for the day is inclusiveness, best exemplified in the total package procurement policy.

As you know, total package procurement contracting envisions that all anticipated development, production, and as much of the support for a system as it's possible to define be procured under one contract. This contract contains price and performance commitments obtained during the contract definition phase of a system procurement.

The C-5A program is something of a pioneering effort in the direction of total package procurement. With the C-5A we had a definite contract before a decision had been made on the winner of the competition. We could take this approach because the systems we wanted were identifiable in performance specifics.

Total Package Procurement—Advantages and Disadvantages

Recently, I have read with much interest the findings of the Logistics Management Institute in Washington on total package procurement advantages and disadvantages. Based on my own experience with this method of contracting and the report of the Logistics Management Institute, I'd like to make a few brief observations.

• First, both the Government and the contractor benefit from the kind of long-run program stability and continuity attainable through the to-

tal package procurement approach. This is particularly true with regard to planning for funding, personnel, facilities and overhead.

• Second, definitized life-cycle contracting forces the Government and industry to thoroughly study and define a weapon system or other product prior to contract signature. It disciplines subsequent government and industry actions, encouraging each partner to face up to the contract and live with it.

• Third, the total package procurement concept discourages changes. To date we can count on the fingers of one hand the number of C-5A engineering changes which have increased target costs in the two years since contract award. In contrast to this extremely small number, there have been over 500 cost changes in another current acquisition program, not total package procurement, in the same period of time.

• Fourth, total package procurement forces good management planning at the outset. There's no room for any lack of thoroughness or buck-passing, at any level of authority. A total package procurement contract should not be vague or interpretive. Anyone who changes the contract must negotiate the changes in a sole source environment.

• Fifth, and I think this is very important, total package procurement doesn't have to be total. We haven't really had a total package procurement yet, and we may never have one. In the C-5, spares and operation and maintenance costs are handled separately. Still, a major part of the hardware procurement has been brought under a single fixed-price incentive contract.

It is not yet obvious how extensively we should use the total package principle. But what are some of the advantages and disadvantages of total package procurement, so far as we can determine now?

Some of the advantages cited by the Logistics Management Institute survey include cost savings, shorter development schedules, better long-range planning, and earlier initial operational capability. These advantages appear real; however, I can't say that the Air Force has enough experience to endorse all of these findings yet. The Institute estimates that savings running to 10 percent

will accrue to the Government as a result of the greater efficiencies in the total package procurement process. We would, of course, like very much to verify this estimate.

I would like to mention at this point that the total package procurement philosophy certainly enables us to compete more favorably for national products in our present climate of expanding civilian economy. Total package procurement helps us to minimize the adverse effects of gradual price increases and longer lead times.

The disadvantages attributed to total package procurement may, in some cases, be considered advantages—depending on who is doing the talking. The report suggests that total package procurement may entail greater financial risk, lead to premature program definition, or cause the contractor to incur increased proposal expenses because of the severe competition. Some analysts today concede that in the long run certain of these total package procurement features may prove to be more positive than negative.

In regard to premature program definition, I don't agree that this is as serious a problem as it may seem on the surface. Admittedly, we must always weigh the relative values of "freezing" a design early, as opposed to making changes during the development or even the production phases. We must permit, and even sponsor, changes that are worthwhile and renegotiate portions of the contract accordingly. The change clause of the contract provides adequate protection for the Government and the contractor. We realize that, when we can spell out systems with great precision, we make it easier for industry to submit good proposals. However, we must not rule out truly desirable changes as opposed to those that would be "nice to have," or those inconsequential changes which only increase costs and extend schedules.

One solution, I suggest, lies in the partial package procurement philosophy I implied earlier. In those areas of fluctuating or uncertain technologies, total package procurement may be too conclusive an approach to be sufficiently responsive.

But in any new system we must draw the line on changes somewhere. I suspect that in total package pro-



Lt. Gen. Charles H. Terhune Jr.,
USAF

curement we are not locking in a system so early that the product will be out-of-date when it's completed. We may, instead, achieve a desirable goal—that of earlier operational availability.

With respect to the contractor proposal expenses, we are trying to assist in reducing the burden on the contractor caused by voluminous proposals and, at the same time, minimize the time and effort required of the Air Force in screening and evaluating these proposals.

You all have heard of the relatively voluminous proposals submitted on the C-5. Following that experience we managed to reduce the cost data volume by 50 percent for the Short Range Attack Missile (SRAM) proposals. For the Maverick program, the third system to go into total package procurement, the contractors were asked to limit their cost data documents to 25 pages for the proposal.

This was accomplished, although I realize the competitors had to generate a lot more data to arrive at 25-page summaries. Now we're hoping to achieve commensurate reductions in the technical data area. In fact, the overall reduction of paper work is a real objective of our Management Systems Control Board.

Gentlemen, in bringing you this presentation today, I have felt a little like the man trapped in an elevator between floors of a tall office building. The superintendent of the building yelled up to him not to worry, that help was on the way because he had summoned the elevator

mechanic. Back came the muffled reply from the elevator shaft, "I am the elevator mechanic."

In serving as the management mechanic at this seminar, I am aware that I have said some things which are subjects of some emotion between the Government and contractors, and sometimes even within the Government itself. Differences of opinion will not go away in an area as vital as contracting. However, additional experience in this area will tend to clear up many differences. The close Air Force-industry relationship has weathered many changes since the days of the Wright brothers. I'm sure it will continue as a major force in strengthening management programs and improving management procedures.

The emphasis on development planning also has relevance for industry. Just as we recognize the value of informing industry of our plans for the future, so might industry benefit by doing more and better development planning, and by including potential subcontractors in this "look ahead."

Good development planning, combined with enlightened and streamlined management procedures, will assure the progressiveness we all expect from the time-honored Air Force-industry partnership.

Foam Reduces Fire Hazards

Air Force Systems Command engineers have adapted a polyurethane foam, originally used in racing cars to retard fire propagation, for use in the fuel tanks of combat aircraft in Vietnam to reduce fire and explosion hazards.

The foam virtually eliminates the risk of explosion in case of a direct hit on the tank by machine gun tracer bullets or other incendiaries. It also suppresses slosh in the tanks during flight and prevents tanks from spewing and spilling fuel spray when ruptured, thus reducing fire hazard.

Polyurethane foam is reticulated—composed of open cells—so that fuel will flow freely through it without being absorbed. The material resembles steel wool but is less dense.

DEPARTMENT OF DEFENSE

PRIME CONTRACT AWARDS BY STATE

TABLE 1. NET VALUE OF MILITARY PROCUREMENT ACTIONS^a

Fiscal Years 1966 and 1967

(Amounts in Thousands)

State	Fiscal Year				Current Quarter			
	July 1965-June 1966		July 1966-June 1967		April-June 1966		April-June 1967	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
TOTAL, U. S. ^b	\$35,713,061		\$41,817,093		\$12,645,511		\$13,067,472	
NOT DISTRIBUTED BY STATE ^c	3,999,758		4,435,430		1,327,918		1,383,534	
STATE TOTALS ^d	31,713,303	100.0%	37,381,663	100.0%	11,317,593	100.0%	11,683,938	100.0%
Alabama	281,549	0.9	297,049	0.8	96,187	0.9	71,731	0.6
Alaska	71,666	0.2	85,648	0.2	22,370	0.2	30,504	0.3
Arizona	248,228	0.8	249,559	0.7	75,511	0.7	63,591	0.5
Arkansas	95,701	0.3	127,180	0.3	27,562	0.2	61,703	0.5
California	5,813,078	18.3	6,688,851	17.9	1,843,560	16.3	2,049,634	17.5
Colorado	255,893	0.8	210,409	0.6	98,742	0.9	85,114	0.7
Connecticut	2,051,560	6.5	1,935,895	5.2	705,802	6.2	432,047	3.7
Delaware	37,445	0.1	51,672	0.1	6,153	0.1	10,360	0.1
District of Columbia	328,111	1.0	357,666	1.0	52,727	0.5	73,600	0.6
Florida	766,955	2.4	799,022	2.1	153,588	1.4	215,946	1.9
Georgia	799,362	2.5	1,148,354	3.1	400,478	3.5	177,843	1.5
Hawaii	64,170	0.2	65,445	0.2	23,311	0.2	24,859	0.2
Idaho	20,004	*	14,772	*	6,729	0.1	3,289	*
Illinois	919,779	2.9	1,063,776	2.8	427,797	3.8	378,630	3.2
Indiana	1,068,259	3.4	898,247	2.4	391,799	3.5	340,712	2.9
Iowa	247,619	0.8	279,328	0.8	98,199	0.9	89,932	0.8
Kansas	312,629	1.0	398,899	1.1	91,735	0.8	112,416	1.0
Kentucky	70,057	0.2	124,294	0.3	23,726	0.2	43,796	0.4
Louisiana	302,906	1.0	656,031	1.8	57,945	0.5	61,518	0.5
Maine	51,340	0.2	56,558	0.2	24,520	0.2	17,544	0.2
Maryland	842,527	2.7	869,808	2.3	283,354	2.5	359,052	3.1
Massachusetts	1,335,952	4.2	1,422,272	3.8	464,335	4.1	445,127	3.8
Michigan	918,426	2.9	1,033,706	2.8	395,362	3.5	390,114	3.3
Minnesota	497,994	1.6	650,584	1.7	164,322	1.5	257,240	2.2
Mississippi	162,305	0.5	114,800	0.3	76,699	0.7	31,227	0.3
Missouri	1,112,665	3.5	2,277,616	6.1	419,092	3.7	796,646	6.8
Montana	13,779	*	78,452	0.2	2,160	*	8,838	0.1
Nebraska	80,478	0.3	103,522	0.3	36,288	0.3	45,567	0.4
Nevada	32,028	0.1	29,315	0.1	4,502	*	6,842	0.1
New Hampshire	109,591	0.3	162,551	0.4	48,578	0.4	54,840	0.5
New Jersey	1,090,122	3.4	1,234,768	3.3	403,390	3.6	381,099	3.3
New Mexico	86,230	0.3	80,472	0.2	25,104	0.2	25,671	0.2
New York	2,819,153	8.9	3,261,750	8.7	1,110,498	9.8	986,832	8.5
North Carolina	449,331	1.4	447,608	1.2	150,244	1.3	122,188	1.0
North Dakota	83,113	0.3	16,729	*	19,396	0.2	6,127	0.1
Ohio	1,588,955	5.0	1,602,593	4.3	579,630	5.1	550,897	4.7
Oklahoma	158,492	0.5	157,350	0.4	36,248	0.3	25,716	0.2
Oregon	89,983	0.3	99,319	0.3	29,200	0.3	27,927	0.2
Pennsylvania	1,665,087	5.3	1,649,142	4.4	749,988	6.6	620,984	5.3
Rhode Island	131,722	0.4	198,030	0.5	66,656	0.6	108,084	0.9
South Carolina	176,424	0.6	180,777	0.5	70,516	0.6	71,045	0.6
South Dakota	23,315	0.1	9,486	*	4,562	*	2,724	*
Tennessee	502,168	1.6	538,225	1.4	184,523	1.6	147,883	1.3
Texas	2,291,454	7.2	3,546,978	9.5	771,032	6.8	1,253,508	10.7
Utah	169,681	0.5	178,850	0.5	40,095	0.4	42,927	0.4
Vermont	81,066	0.3	100,157	0.3	39,568	0.3	46,226	0.4
Virginia	425,487	1.3	665,240	1.8	170,298	1.5	213,744	1.8
Washington	444,368	1.4	606,114	1.6	97,778	0.9	123,737	1.1
West Virginia	149,300	0.5	140,324	0.4	61,623	0.5	38,701	0.3
Wisconsin	364,684	1.1	383,602	1.0	181,921	1.6	138,719	1.2
Wyoming	11,112	*	32,868	0.1	2,190	*	8,937	0.1

For Footnotes, see Page 32.

* Less than 0.05%.

TABLE 2. NET VALUE OF MILITARY PROCUREMENT ACTIONS BY DEPARTMENT ^a

Fiscal Year 1967

(Amounts in Thousands)

State	Total		Army	Navy	Air Force	Defense Supply Agency
	Amount	Percent				
TOTAL U. S. ^b	\$41,817,093		\$11,371,380	\$13,093,162	\$11,654,833	\$5,697,718
NOT DISTRIBUTED BY STATE ^c	4,435,430		1,153,093	1,170,481	1,162,812	949,044
STATE TOTALS ^d	37,381,663	100.0%	10,218,287	11,922,681	10,492,021	4,748,674
Alabama	297,049	0.8	136,605	20,750	48,820	90,874
Alaska	85,648	0.2	36,661	7,246	35,262	6,479
Arizona	249,559	0.7	64,286	43,916	130,759	10,598
Arkansas	127,180	0.3	27,019	17,477	35,373	47,311
California	6,688,851	17.9	1,052,327	2,341,150	2,650,810	644,564
Colorado	210,409	0.6	37,509	22,562	124,208	26,130
Connecticut	1,935,895	5.2	547,834	1,040,348	279,607	68,106
Delaware	51,672	0.1	6,477	18,147	6,977	20,071
District of Columbia	357,666	1.0	110,588	183,617	59,947	3,514
Florida	799,022	2.1	292,677	130,813	297,554	77,978
Georgia	1,148,354	3.1	76,567	49,505	922,462	99,820
Hawaii	65,445	0.2	22,904	19,974	6,003	16,564
Idaho	14,772	*	374	746	2,037	11,615
Illinois	1,063,776	2.8	532,687	154,367	162,470	214,252
Indiana	898,247	2.4	442,388	146,237	206,648	102,974
Iowa	279,328	0.8	121,779	79,726	31,561	46,262
Kansas	398,899	1.1	204,184	11,515	143,221	39,979
Kentucky	124,294	0.3	61,041	2,082	7,323	53,848
Louisiana	656,031	1.8	124,415	317,805	11,267	202,544
Maine	56,558	0.2	10,973	22,814	6,027	16,744
Maryland	869,808	2.3	143,674	510,244	154,542	61,348
Massachusetts	1,422,272	3.8	366,857	435,291	467,552	152,572
Michigan	1,033,706	2.8	673,068	89,224	120,280	151,134
Minnesota	650,584	1.7	226,042	179,809	179,085	65,648
Mississippi	114,800	0.3	15,717	28,744	18,301	52,038
Missouri	2,277,616	6.1	330,101	1,732,415	142,945	72,155
Montana	78,452	0.2	8,179	258	65,154	4,861
Nebraska	103,522	0.3	58,181	519	14,691	30,131
Nevada	29,315	0.1	10,262	1,430	16,222	1,401
New Hampshire	162,551	0.4	3,953	111,298	21,578	25,722
New Jersey	1,234,768	3.3	353,642	352,196	275,332	253,598
New Mexico	80,472	0.2	50,003	3,111	22,164	5,194
New York	3,261,750	8.7	771,645	1,490,878	637,534	361,693
North Carolina	447,608	1.2	177,389	63,591	24,069	182,559
North Dakota	16,729	*	3,812	594	8,737	3,586
Ohio	1,602,593	4.3	436,462	382,755	658,164	125,212
Oklahoma	157,350	0.4	32,516	8,300	67,492	49,042
Oregon	99,319	0.3	7,776	24,480	8,037	59,026
Pennsylvania	1,649,142	4.4	624,787	504,653	256,590	263,112
Rhode Island	198,030	0.5	23,996	111,175	2,859	60,000
South Carolina	180,777	0.5	27,036	29,883	13,946	109,912
South Dakota	9,486	*	2,069	490	4,389	2,538
Tennessee	538,225	1.4	267,102	63,794	88,327	119,002
Texas	3,546,978	9.5	1,043,184	603,523	1,464,298	435,973
Utah	178,850	0.5	31,599	6,366	111,415	29,470
Vermont	100,157	0.3	82,953	4,135	10,490	2,579
Virginia	665,240	1.8	217,262	343,767	35,484	68,727
Washington	606,114	1.6	66,913	114,109	353,983	71,109
West Virginia	140,324	0.4	93,138	6,703	9,297	31,186
Wisconsin	383,602	1.0	159,262	88,149	44,240	91,951
Wyoming	32,868	0.1	412	0	26,488	5,968

For Footnotes, see Page 32.

* Less than 0.05%

TABLE 3. NET VALUE OF MILITARY PROCUREMENT ACTIONS BY FISCAL YEAR^a

Fiscal Years 1964, 1965 and 1966

(Amounts in Thousands)

State	Fiscal Year 1964		Fiscal Year 1965		Fiscal Year 1966	
	Amount	Percent	Amount	Percent	Amount	Percent
TOTAL, U. S. ^b	\$27,470,379		\$26,631,132		\$35,713,061	
NOT DISTRIBUTED BY STATE ^c	3,053,272		3,363,052		3,999,758	
STATE TOTALS ^d	24,417,107	100.0%	23,268,080	100.0%	31,713,303	100.0%
Alabama	190,681	0.8	165,176	0.7	281,549	0.9
Alaska	101,545	0.4	74,175	0.3	71,666	0.2
Arizona	173,825	0.7	176,857	0.8	248,228	0.8
Arkansas	29,731	0.1	39,284	0.2	95,701	0.3
California	5,100,650	21.0	5,153,639	22.1	5,813,078	18.3
Colorado	389,511	1.6	249,151	1.1	255,893	0.8
Connecticut	1,126,054	4.6	1,180,111	5.1	2,051,560	6.5
Delaware	30,424	0.1	38,239	0.2	37,445	0.1
District of Columbia	222,947	0.9	247,576	1.0	328,111	1.0
Florida	782,591	3.2	633,332	2.7	766,955	2.4
Georgia	520,169	2.1	662,417	2.8	799,362	2.5
Hawaii	52,112	0.2	72,213	0.3	64,170	0.2
Idaho	7,804	*	11,724	0.1	20,004	*
Illinois	429,201	1.8	421,899	1.8	919,779	2.9
Indiana	537,940	2.2	604,925	2.6	1,068,259	3.4
Iowa	103,392	0.4	133,951	0.6	247,619	0.8
Kansas	289,045	1.2	229,051	1.0	312,629	1.0
Kentucky	40,476	0.2	42,749	0.2	70,057	0.2
Louisiana	181,427	0.7	255,834	1.1	302,906	1.0
Maine	31,531	0.1	68,771	0.3	51,340	0.2
Maryland	547,936	2.3	584,333	2.5	842,527	2.7
Massachusetts	1,032,062	4.2	1,178,729	5.1	1,335,952	4.2
Michigan	591,290	2.4	532,897	2.3	918,426	2.9
Minnesota	217,941	0.9	259,500	1.1	497,994	1.6
Mississippi	155,911	0.6	152,188	0.7	162,305	0.5
Missouri	1,349,071	5.5	1,060,781	4.6	1,112,665	3.5
Montana	16,422	0.1	69,375	0.3	13,779	*
Nebraska	33,921	0.1	42,708	0.2	80,478	0.3
Nevada	6,361	*	19,142	0.1	32,028	0.1
New Hampshire	64,857	0.3	52,400	0.2	109,591	0.3
New Jersey	917,561	3.8	820,309	3.5	1,090,122	3.4
New Mexico	71,486	0.3	84,137	0.4	86,230	0.3
New York	2,496,438	10.2	2,229,473	9.6	2,819,153	8.9
North Carolina	273,516	1.1	288,408	1.2	449,331	1.4
North Dakota	192,025	0.8	48,997	0.2	83,113	0.3
Ohio	1,028,946	4.2	863,113	3.7	1,588,955	5.0
Oklahoma	122,489	0.5	119,803	0.5	158,492	0.5
Oregon	29,104	0.1	39,624	0.2	89,983	0.3
Pennsylvania	883,065	3.6	988,811	4.2	1,665,087	5.3
Rhode Island	38,173	0.2	86,323	0.4	131,722	0.4
South Carolina	51,621	0.2	81,580	0.4	176,424	0.6
South Dakota	23,308	0.1	21,062	0.1	23,315	0.1
Tennessee	193,564	0.8	197,283	0.8	502,168	1.6
Texas	1,294,431	5.3	1,446,769	6.2	2,291,454	7.2
Utah	340,040	1.4	191,173	0.8	169,681	0.5
Vermont	14,012	0.1	32,202	0.1	81,066	0.3
Virginia	690,852	2.8	469,097	2.0	425,487	1.3
Washington	1,085,696	4.5	545,607	2.3	444,368	1.4
West Virginia	87,327	0.4	90,312	0.4	149,300	0.5
Wisconsin	177,217	0.7	203,003	0.9	364,684	1.1
Wyoming	49,408	0.2	7,867	*	11,112	*

For Footnotes, see Page 32.

* Less than 0.05%.

TABLE 4. NET VALUE OF CIVIL FUNCTIONS PROCUREMENT ACTIONS^e

Fiscal Years 1964, 1965, 1966 and 1967

(Amount in Thousands)

	Fiscal Year 1964 Jul 63-Jun 64	Fiscal Year 1965 Jul 64-Jun 65	Fiscal Year 1966 Jul 65-Jun 66	Fiscal Year 1967 Jul 66-Jun 67
TOTAL, U.S. ^b	\$709,990	\$847,926	\$878,301	\$819,218
NOT DISTRIBUTED BY STATE ^c	37,753	41,020	43,532	40,875
STATE TOTALS ^d	672,237	806,906	834,769	778,343
Alabama	8,766	11,958	16,229	18,441
Alaska	10,599	39,516	15,808	2,818
Arizona	4,011	4,301	2,816	2,742
Arkansas	54,671	76,315	89,427	81,658
California	43,741	59,239	57,844	52,991
Colorado	135	3,702	922	1,539
Connecticut	4,647	5,476	5,197	7,212
Delaware	9,081	8,539	8,973	12,658
District of Columbia	2,033	887	866	1,071
Florida	28,290	27,659	26,273	35,334
Georgia	2,317	6,862	7,345	9,390
Hawaii	1,916	1,608	1,439	244
Idaho	1,500	3,060	5,822	19,556
Illinois	15,188	24,194	22,192	18,046
Indiana	14,970	22,597	25,080	18,052
Iowa	16,166	14,365	12,160	14,578
Kansas	21,304	18,248	12,884	11,611
Kentucky	28,154	19,303	20,219	21,701
Louisiana	33,279	32,156	54,921	40,600
Maine	1,879	2,238	1,628	1,065
Maryland	8,080	21,457	10,212	1,977
Massachusetts	12,390	11,993	5,065	2,703
Michigan	4,347	12,035	13,027	10,915
Minnesota	2,532	1,686	4,128	3,902
Mississippi	13,673	12,018	16,594	18,300
Missouri	20,144	22,756	29,799	30,941
Montana	83	1,100	3,774	21,840
Nebraska	4,558	8,148	8,613	6,112
Nevada	0	0	0	17
New Hampshire	219	2,431	1,693	107
New Jersey	5,784	6,803	3,303	2,163
New Mexico	724	1,117	3,748	5,955
New York	12,355	13,535	12,400	8,351
North Carolina	3,425	3,797	4,004	3,534
North Dakota	503	1,739	3,311	2,151
Ohio	25,835	17,939	15,884	12,442
Oklahoma	24,699	13,952	31,514	48,773
Oregon	48,034	74,243	86,906	44,354
Pennsylvania	36,678	41,620	37,776	37,760
Rhode Island	3,195	4,951	4,491	574
South Carolina	2,751	3,608	2,472	2,571
South Dakota	11,319	10,915	6,351	2,249
Tennessee	8,946	14,626	18,773	14,039
Texas	49,443	39,420	32,310	28,317
Utah	0	41	565	0
Vermont	64	33	58	90
Virginia	3,770	9,364	6,360	8,764
Washington	36,419	36,323	55,957	58,974
West Virginia	25,578	33,587	23,182	24,039
Wisconsin	3,410	3,426	4,094	5,122
Wyoming	632	20	290	0

For Footnotes, see Page 32.

DOD Prime Contract Awards by State

Footnotes

^a See Note on Coverage below.

^b Includes all contracts awarded for work performance in the United States. The United States includes to 50 states, the District of Columbia, U.S. possessions, the Canal Zone, the Commonwealth of Puerto Rico, and other areas subject to the complete sovereignty of the United States, but does not include occupied Japanese islands and trust territories.

^c Includes contracts of less than \$10,000, all contracts awarded for work performance in the Commonwealth of Puerto Rico, U.S. possessions, and other areas subject to the complete sovereignty of the United States; contracts which are in a classified location; and any intragovernmental contracts entered into overseas.

^d Net value of contracts of \$10,000 or more for work in each state and the District of Columbia.

^e Civil functions of the Army Corps of Engineers for flood control and rivers and harbors work. Civil functions data are shown separately, and are not included in military functions tabulations.

Notes on Coverage

It is emphasized that data on prime contracts by state do not provide any direct indication as to the state in which the actual production work is done. For the majority of contracts with manufacturers, the data reflect location of the plant where the product will be finally processed and assembled. If processing or assembly is to be performed in more than one plant of a prime contractor, the location shown is the plant where the largest dollar amount of work will take place. Construction contracts are shown for the state where the construction is to be performed. For purchases from wholesale or other distribution firms, the location is the address of the contractor's place of business. For service contracts, the location is generally the place where the service is performed, but for transportation and communications services the

home office address is frequently used.

More important is the fact that the reports refer to prime contracts only, and cannot in any way reflect the distribution of the very substantial amount of material and component fabrication and other subcontract work that may be done outside the state, where final assembly or delivery takes place.

The report includes definitive contracts and funded portions of letter contracts and letters of intent, job orders, task orders, and purchase orders on industrial firms; and also includes interdepartmental purchases made from or through other government agencies, such as those made through the General Services Administration. The state data include upward or downward revisions and adjustments of \$10,000 or more, such as cancellations, price changes, supplemental agreements, amendments, etc.

The estimated amounts of indefinite delivery, open-end, or call type contracts for petroleum are included in the report. Except for petroleum contracts, the report does not include indefinite delivery, open-end, or call type contracts as such, but does include specific purchase or delivery orders of \$10,000 or more which are placed against these contracts. Also excluded from the report are project orders, *i.e.*, production orders issued to government-owned-and-operated facilities, such as Navy shipyards. However, the report includes the contracts placed with industry by the government-operated facility to complete the production order.

Control of Army Missile Plant Transferred

Control of the Army Missile Plant, Warren, Mich., has been transferred from the Army Tank-Automotive Command to the Army Missile Command, Redstone Arsenal, Huntsville, Ala.

Effective date for the change was Sept. 30; however, all arrangements will not be completed until Dec. 1.

(Continued from Page 22)

(U.S. Supreme Court, April 10, 1967); and Nager Electric Co. vs. United States (Court of Claims, Oct. 14, 1966).

Training and Educational Costs—ASPR 15-204.44. To consider whether changes in the training and educational requirements of contractors and the manner of meeting such changes warrants a revision of the present ASPR 15-204.44 to be in step with present needs.

G&A Expenses—ASPR 15-203(c). To consider whether ASPR 15-203(c) should be revised to provide special coverage relating to allowability of G&A expenses, and to require that the base used to distribute G&A, whatever it may be, shall include all items applicable to the base, subject only to adjustments necessary to determine the total amount of the base for the period covered; and to require that amounts included in the base shall bear their applicable share of G&A, wherever they are disapproved under government contracts.

Pricing of Technical Data. To consider the development of appropriate ASPR coverage with respect to the pricing of technical data, giving consideration to the advisability and feasibility of providing for one or more of the following:

- Including technical data price as a part of the item to be delivered.
- Requiring contracts to specify all items of technical data as line items along with their prices.
- Requiring contracts to list only one price for all technical data.
- Requiring contracts to contain prices for the major categories of technical data, such as technical manuals, pre-procurement data, etc.

Help Wanted Advertising—ASPR 15-205.33. To consider revising the cost principle to define the type of recruiting advertising that is allowable.

Technical Data Warranty. To consider the advisability of incorporating in ASPR Section IX, Part 2, a warranty clause for technical data.

Minimum Wage Increases Under Long-Term Service Contracts. To consider the advisability of an escalation clause for multi-year service contracts to provide for contract adjustment when the minimum wage rate is increased as a result of government action.



DEFENSE PROCUREMENT

Contracts of \$1,000,000 and over awarded during the month of September 1967:

DEFENSE SUPPLY AGENCY

- 1—Syro Steel Co., Girard, Ohio. \$8,041,680. 36,000 bundles of steel landing mat sets. Defense Construction Supply Center, Columbus, Ohio.
- Coastal States Petrochemical Co., Houston, Tex. \$3,225,730. 30,450,000 gallons of JP-4 jet fuel. Defense Fuel Supply Center, Alexandria, Va.
- MacMillan Ring-Free Oil Co., Los Angeles, Calif. \$1,106,880. 800,000 barrels of number six fuel oil. Defense Fuel Supply Center, Alexandria, Va.
- 5—Pembroke, Inc., Egg Harbor City, N.J. \$1,898,817. 79,615 men's blue serge wool overcoats. Defense Personnel Support Center, Philadelphia, Pa.
- California & Hawaiian Sugar Refining Co., San Francisco, Calif. \$1,005,722. 7,944,000 lbs. of granulated sugar. Defense Personnel Support Center, Philadelphia, Pa.
- 7—K. M. Wilson Co., Centerville, Tenn. \$2,256,800. 451,360 nylon twill ponchos. Defense Personnel Support Center, Philadelphia, Pa.
- 8—L. B. Lawson & Co., Long Beach, Calif. \$1,232,523. 57,300 cases of ration supplement sundry packs. Defense Personnel Support Center, Philadelphia, Pa.
- Firestone Tire & Rubber Co., Akron, Ohio. \$1,609,075. 388,290 steel-helmet liners. Defense Personnel Support Center, Philadelphia, Pa.
- 11—Stone Mfg. Co., Columbia, S.C. \$1,605,215. 3,788,952 pairs of men's cotton drawers. Defense Personnel Support Center, Philadelphia, Pa.
- J. B. Mfg. Co., San Antonio, Tex. \$1,548,602. 3,560,088 pairs of men's cotton drawers. Defense Personnel Support Center, Philadelphia, Pa.
- 14—B. G. Colton & Co., New York, N.Y. \$3,561,562. 2,175,000 yards of wind resistant cotton oxford cloth for the Army. Defense Personnel Support Center, Philadelphia, Pa.
- Pittston Clinchfield Coal Sales Corp., New York, N.Y. \$2,730,000. 455,000 net tons of bituminous coal. Defense Fuel Supply Center, Alexandria, Va.
- Rubber Fabricators, Grantsville, W. Va. \$2,033,703. 288,060 pneumatic mattresses. Defense Personnel Support Center, Philadelphia, Pa.
- Montgomery Pipe & Tube Co., Miami, Fla. \$1,905,550. 230,000 coils of concertina barbed wire. Defense Construction Supply Center, Columbus, Ohio.
- 15—Johnson & Johnson, New Brunswick, N.J. \$1,116,225. 1,276,562 packages of surgical sponges. Defense Personnel Support Center, Philadelphia, Pa.
- 18—Gulf Oil Corp., New York, N.Y. \$1,323,000. 12,600,000 gallons of JP-5 jet fuel. Defense Fuel Supply Center, Alexandria, Va.
- 19—Valley Metallurgical Processing Co., Essex, Conn. \$5,083,986. 6,799,500 lbs. of magnesium powder. Defense General Supply Center, Richmond, Va.

CONTRACT LEGEND

Contract information is listed in the following sequence: Date—Company—Value—Material or Work to be Performed—Location of Work Performed (if other than company plant)—Contracting agency.

- 20—Perl Pillow Co., Houston, Tex. \$3,098,263. 209,572 mountain sleeping bags. Defense Personnel Support Center, Philadelphia, Pa.
- 21—J. P. Stevens & Co., New York, N.Y. \$2,021,499. 575,000 linear yards of wool serge cloth. Defense Personnel Support Center, Philadelphia, Pa.
- 22—Bootz Mfg. Co., Evansville, Ind. \$2,523,676. 39,172 field range, gasoline burner units. Defense General Supply Center, Richmond, Va.
- 25—Sidran Sportswear, Dallas, Tex. \$1,726,074. 173,040 men's coated nylon twill raincoats. Defense Personnel Support Center, Philadelphia, Pa.
- M. Wile & Co., Buffalo, N.Y. \$1,277,356. 50,000 men's polyester/wool tropical coats. Defense Personnel Support Center, Philadelphia, Pa.
- 26—U.S. Metal Container Co., Miami, Okla. \$1,119,650. 320,000 five-gallon gasoline cans. Defense General Supply Center, Richmond, Va.
- Goodstein Bros. and Co., New York, N.Y. \$1,205,717. 46,344 men's wool serge overcoats. Defense Personnel Support Center, Philadelphia, Pa.
- 29—The Defense General Supply Center, Richmond, Va., has awarded the following contracts for polypropylene sandbags:
 - Pioneer Bag Co., Kansas City, Mo. \$3,061,660. 16,350,000 sandbags.
 - Bemis Co., Minneapolis, Minn. \$1,335,000. 7,000,000 sandbags.
 - Continental Bag Co., Crowley, La. \$1,234,920. 6,350,000 sandbags.
 - Sparling Mills, Greenville, R.I. \$1,900,000. 10,000,000 sandbags.



DEPARTMENT OF THE ARMY

- 1—Harnischfeger Corp., Milwaukee, Wis. \$1,127,088. Twenty-ton cranes, Escanaba, Wash. Mobility Equipment Command, St. Louis, Mo.
- American Optical Co., Keene, N.H. \$3,621,651. XM44E1 periscopes and related spare parts. Frankford Arsenal, Philadelphia, Pa.
- General Dynamics, Pomona, Calif. \$7,747,719. Long lead time items required in the manufacture of Redeye weapons system hardware for FY 1968. Army Missile Command, Huntsville, Ala.
- Hughes Aircraft, Culver City, Calif. \$4,900,000. TOW industrial engineering services. Army Missile Command, Huntsville, Ala.
- White Motor Corp., Lansing, Mich. \$1,093,860. Cylinder heads for 2½-ton trucks. Tank Automotive Command, Warren, Mich.
- J. W. Bateson Co. \$10,633,010. Construction of 10 enlisted men's barracks complexes at Fort Gordon, Ga. Engineer Dist., Savannah, Ga.
- Shellmaker, Inc., San Francisco, Calif. \$1,517,800. Widening of the Redondo Beach, Calif., breakwater and for beach protection. Engineer Dist., Los Angeles, Calif.
- Colt's, Inc., Hartford, Conn. \$25,871,701. M16A1 rifles. Army Weapons Command, Rock Island, Ill.
- 5—John Wood Co., St. Paul, Minn. \$3,672,240. Fin assemblies for 750-lb. bombs. Ammunition Procurement & Supply Agency, Joliet, Ill.
- L. T. Industries, Inc., Dallas, Tex. \$2,860,650. Fin assemblies for 750-lb. bombs.
- Garland, Tex. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Poloron Products, New Rochelle, N.Y. \$2,176,000. Fin assemblies for 750-lb. bombs. Scranton, Pa. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Sante Fe Engineers, Lancaster, Calif. \$2,885,000. Construction work on remodeling a SAGE building for conversion into an audio-visual facility. Norton AFB, Calif. Engineer Dist., Los Angeles, Calif.
- 6—AVCO Corp., Stratford, Conn. \$1,481,000. Blade sets and support assemblies for T53 turbine engines. Aviation Materiel Command, St. Louis, Mo.
- Firestone Tire & Rubber Co., Akron, Ohio. \$2,643,432. Track shoe assemblies for M60A1E2 tanks and M728 combat engineer vehicles. Noblesville, Ind. Tank Automotive Command, Warren, Mich.
- Chrysler Corp., Centerline, Mich. \$11,162,256. Fork lift trucks. Warren, Mich. Mobility Equipment Command, St. Louis, Mo.
- Cadillac Gage Co., Warren, Mich. \$1,632,000. Light armored cars. Tank Automotive Command, Warren, Mich.
- Western Electric, New York, N.Y. \$215,270,329. Continued research and development of the Nike-X missile system. Whippany, N.J.; Burlington, N.C.; Orlando, Fla.; Bedford, Mass.; St. Paul, Minn.; Syracuse, N.Y.; and Santa Monica, Calif. \$13,168,631. Deployment planning activities for the Nike X missile system. Redwood City, Calif.; Bedford, Mass. and Wayland, Mass. \$3,000,000. Facilities to support Nike X research and development. Nike X Project Office, Redstone Arsenal, Huntsville, Ala.
- 7—Bell Aerospace Corp., Fort Worth, Tex. \$37,656,217. UH-1H helicopters. Aviation Materiel Command, St. Louis, Mo.
- Bell Aerospace Corp., Fort Worth, Tex. \$25,170,000. AH-1G helicopters. Aviation Materiel Command, St. Louis, Mo.
- Chamberlain Mfg. Corp., Waterloo, Iowa. \$4,750,200. Metal parts for 175mm projectiles. Scranton, Pa. Ammunition Procurement & Supply Agency, Joliet, Ill.
- International Harvester Co., Melrose Park, Ill. \$2,693,023. Diesel engine driven tractors. Chicago, Ill. Mobility Equipment Command, St. Louis, Mo.
- Ryan Stevedoring Co., Mobile, Ala. \$13,156,488. Stevedoring and related terminal services for period of Oct. 1, 1967 through Sept. 30, 1969. Southport, N.C. Eastern Area Military Traffic Management and Terminal Service, Brooklyn, N.Y.
- Canadian Commercial Corp., Ottawa, Canada. \$1,589,250. Major components of the AN/ASN-64 Doppler navigation set. Electronics Command, Fort Monmouth, N.J.
- 8—General Motors, Detroit, Mich. \$1,023,000. Support services in the production of 155mm projectiles. St. Louis, Mo. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Honeywell, Inc., Hopkins, Minn. \$2,309,760. Metal parts for nose fuzes for 750-lb. bombs. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Morris & Sons Co., Ogden, Utah. \$7,375,801. Construction of a fish hatchery and appurtenant works at the Dworshak Reservoir Project, Orofino, Idaho. Engineer Dist., Walla Walla, Wash.
- 11—National Gypsum Co., Buffalo, N.Y. \$8,386,800. Loading, assembling and packing ammunition and ammunition components. Parsons, Kan. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Grumman Aircraft Engineering Corp., Bethpage, N.Y. \$3,216,600. Modification of OV-1B and OV-1C Mobawk aircraft and related testing, data, and reports, and support for one year. Aviation Materiel Command, St. Louis, Mo.
- Peter Kiewit Sons' Co., Omaha, Neb. \$1,397,100. Construction and material for a stone retaining dyke at Cleveland, Ohio. Engineer Dist., Buffalo, N.Y.

- Atlas Chemical Industries, Valley Forge, Pa. \$1,292,500. Detonators. Reynolds, Pa. Picatinny Arsenal, Dover, N.J.
- 12—Bethlehem Steel Corp., Bethlehem, Pa. \$1,651,511. Components for 175mm guns. Watervliet Arsenal, Watervliet, N.Y.
- Privitt Plastics, Inc., Mineral Wells, Tex. \$1,300,024. Plastic grommets for 155mm shells. Ammunition Procurement & Supply Agency, Joliet, Ill.
- 13—Continental Motors, Muskegon, Mich. \$5,416,668. Five-ton-truck engines. Tank Automotive Command, Warren, Mich.
- Honeywell, Inc., Hopkins, Minn. \$2,847,512. Grenade fuzes. New Brighton, Minn. and St. Louis Park, Minn. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Lockheed-Gorgia Co., Marietta, Ga. \$1,570,207. Gun tubes for 105mm cannons. Chattanooga, Tenn. Watervliet Arsenal, Watervliet, N.Y.
- 14—Peter Kiewit Sons' Co., Omaha, Neb. \$9,744,994. Completion of work on the lock at Dardanelle Lock and Dam, Arkansas. Engineer Dist., Little Rock, Ark.
- Baldwin-Lime-Hamilton Corp., Eddystone, Pa. \$9,468,600. Design, performance model testing, manufacture and delivery of hydraulic turbines for The Dalles, Ore., dam project. Engineer Dist., Portland, Ore.
- Jarka Corp., Baltimore, Md. \$4,451,413. Stevedoring and related terminal services from Oct. 1, 1967 through Sept. 30, 1969, at the Dundalk Marine Terminal, Baltimore, Md. Headquarters, Eastern Area, Military Traffic Management and Terminal Service, Brooklyn, N.Y.
- Philco-Ford Corp., Newport Beach, Calif. \$4,024,297. Delivery stretch out, incorporation of engineering release records, and engineering changes pertaining to the Chapparral missile system. Army Missile Command, Huntsville, Ala.
- Atlantic, Gulf & Pacific Co., New York, N.Y. \$1,681,485. Dredging sections of the inland waterway from the Delaware River to Chesapeake Bay. Engineer Dist., Philadelphia, Pa.
- 15—A. O. Smith Corp., Chicago, Ill. \$19,110,700. 750-lb. bombs. Waco, Tex. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Hercules, Inc., Wilmington, Del. \$16,948,393. Miscellaneous propellants and explosives. Radford, Va. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Chamberlain Mfg. Corp., Waterloo, Iowa. \$4,470,484. 155mm projectiles. Scranton, Pa. Ammunition Procurement & Supply Agency, Joliet, Ill.
- General Dynamics, Rochester, N.Y. \$4,699,062. Radio sets. Electronics Command, Philadelphia, Pa.
- General Motors, Cleveland, Ohio. \$3,144,120. 155mm, M109 howitzers. Army Weapons Command, Rock Island, Ill.
- General Motors, Indianapolis, Ind. \$2,757,475. General Sheridan tank transmissions. Tank Automotive Command, Warren, Mich.
- Minnesota Mining & Mfg., Rochester, N.Y. \$2,110,406. M47 and M48 periscope sets with equipment and spare parts. Frankford Arsenal, Philadelphia, Pa.
- General Motors, Detroit, Mich. \$1,433,734. 6V53T engines for the General Sheridan tank. Tank Automotive Command, Warren, Mich.
- 18—Amis Construction Co., Oklahoma City, Okla. \$3,527,120. Work on the Robert S. Kerr Lock and Dam at Sallisaw, Okla. Engineer Dist., Tulsa, Okla.
- John Wood Co., St. Paul, Minn. \$1,237,248. Fin assemblies with crates for the 750-lb. bomb. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Technical Operations, Inc., Burlington, Mass. \$1,133,000. Additional scientific and technical effort for the Combat Development Command, Fort Belvoir, Va. Northwest Procurement Detachment, Oakland, Calif.
- 19—Kentrone Hawaii, Ltd., Honolulu, Hawaii. \$7,690,024. Operation, maintenance and development of Kwajalein Test Site Technical Facilities. Nike X Project Office, Huntsville, Ala.
- American Cystoscope Makers, Inc., Pelham Manor, N.Y. \$1,603,750. Periscopes for use on Main Battle Tanks. New York, N.Y. Frankford Arsenal, Philadelphia, Pa.
- General Time Corp., Stamford, Conn. \$1,335,000. Booster and safety devices for artillery fuzes. Gadsden, Ala. Ammunition Procurement & Supply Agency, Joliet, Ill.
- AVCO Corp., Stratford, Conn. \$1,668,161. Repair parts, ground support equipment and special tools in support of T-55-L-11 engines for CH-47 Chinook helicopters. \$4,540,998. Conversion kits to modify engines for CH-47 helicopters. Aviation Materiel Command, St. Louis, Mo.
- 20—General Electric, Schenectady, N.Y. \$1,181,395. Klystron tubes for high power acquisition radar for Nike Hercules. Army Missile Command, Huntsville, Ala.
- R. G. LeTourneau, Inc., Longview, Tex. \$5,366,150. 750-lb. demolition bombs. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Kollsman Instrument Corp., Elmhurst, N.Y. \$1,062,026. Firing devices for anti-personnel mines. Bridgeport, Conn. Picatinny Arsenal, Dover, N.J.
- General Motors, Kokomo, Ind. \$2,182,059. Radio transmitters and receivers. Electronics Command, Philadelphia, Pa.
- 21—Standard Container Co., Montclair, N.J. \$1,650,000. Ammunition packing boxes. Homerville, Ga. Frankford Arsenal, Philadelphia, Pa.
- Brads Machine Products, Gadsden, Ala. \$3,062,040. Booster and safety devices for artillery fuzes. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Chrysler Corp., Centerline, Mich. \$1,954,064. Fork lift trucks. Warren, Mich. Mobility Equipment Command, St. Louis, Mo.
- Anthony Co., Streator, Ill. \$1,028,950. Fork lift trucks. Mobility Equipment Command, St. Louis, Mo.
- 22—General Motors, Detroit, Mich. \$15,000,000. Metal parts for 105mm high explosive projectiles. St. Louis, Mo. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Weatherhead Co., Cleveland, Ohio. \$1,164,596. Pressure plates for 4.2-inch cartridge assemblies. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Pensacola Construction Co., Kansas City, Mo. \$1,058,650. Work on the Mississippi River and Tributaries-Channel Improvement Project. Near Greenville, Miss. and Lake Village, Ark. Engineer Dist., Vicksburg, Miss.
- Massman Construction Co. and Al Johnson Construction Co., Kansas City, Mo. \$28,552,645. Work on the Kaskaskia River Navigation Project. Ellis Grove, Ill. Engineer Dist., St. Louis, Mo.
- Johnson Corp., Bellevue, Ohio. \$1,000,754. 1½-ton cargo trailers. Tank Automotive Command, Warren, Mich.
- Hol-Gar Mfg. Co., Primos, Pa. \$1,058,750. 28-volt generator sets. Mobility Equipment Command, St. Louis, Mo.
- Litton Systems, Van Nuys, Calif. \$2,549,520. Data Converters, Coordinated Air Defense Systems. Van Nuys and Salt Lake City, Utah. Army Missile Command, Huntsville, Ala.
- 25—Honeywell, Inc., Tampa, Fla. \$5,500,000. Classified electronics equipment. Electronics Command, Fort Monmouth, N.J.
- Litton Systems, Woodland Hills, Calif. \$1,500,000. Airborne navigation systems for OV-1D Mohawk helicopters and ancillary items. Electronics Command, Fort Monmouth, N.J.
- RCA, Van Nuys, Calif. \$1,000,000. Classified electronics equipment. Electronics Command, Fort Monmouth, N.J.
- Mason Rust, Pittsburgh, Pa. \$7,780,000. Reactivation of facilities at Gateway Army Ammunition Plant, St. Louis, Mo. Engineer Dist., Kansas City, Mo.
- 26—Ford Motors, Dearborn, Mich. \$3,840,925. ¼-ton utility trucks. Highland Park, Mich. General Purpose Vehicles Project Manager, Warren, Mich.
- Zenith Radio Corp., Chicago, Ill. \$2,135,480. Metal parts for 66mm rocket fuzes. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Stanford Research Institution, Menlo Park, Calif. \$2,098,784. Antimissile Missile System study. Nike-X Project Office, Redstone Arsenal, Huntsville, Ala.
- List & Clark Construction Co., Overland Park, Kan. \$1,174,432. Construction of a new roadway and bridge at Stockton Reservoir, Stockton, Mo. Engineer Dist., Kansas City, Mo.
- Lsi Service Corp., Mid West City, Okla. \$3,895,794. Maintenance of Army aircraft. Aviation Materiel Command, St. Louis, Mo.
- Dynalectron Corp., Fort Worth, Tex. \$2,938,932. Maintenance of Army aircraft. Aviation Materiel Command, St. Louis, Mo.
- Boeing Co., Morton, Pa. \$1,338,630. Rotary heads for CH-47 helicopters. \$1,115,624. Inspection and repair of CH-47A aircraft. Aviation Materiel Command, St. Louis, Mo.
- 27—National Presto Industries, Eau Claire, Wis. \$10,000,000. Metal parts for 105mm projectiles. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Supreme Products Corp., Chicago, Ill. \$1,514,100. Metal parts for 750-lb. bomb nose fuzes. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Avionics, Inc., South Bend, Ind. \$1,375,544. Cable assemblies for 250 and 500 lb. bombs. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Zenith Radio Corp., Chicago, Ill. \$1,228,200. Metal parts for 66mm rocket fuzes. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Morrison Knudsen Co., South Gate, Calif. \$1,175,500. Sealing the site construction area at the New Melones Dam on the Stanislaus River in California. Corps of Engineers.
- Brezina Construction Co., Rapid City, S.D. and Korshof Construction Co., Blair, Neb. \$1,030,000. Construction of a levee along the Missouri River near Bellevue, Neb. Corps of Engineers.
- 28—Chamberlain Mfg. Corp., Waterloo, Iowa. \$3,656,800. 2.75-inch rocket warheads. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Columbus Milpar Mfg. Co., Columbus, Ohio. \$1,917,000. Metal parts for 81mm cartridge point detonating fuzes. Westerville, Ohio. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Honeywell, Inc., Hopkins, Minn. \$1,689,048. Metal parts for 40mm cartridges. New Brighton, Minn. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Supreme Products, Chicago, Ill. \$1,505,000. Metal parts for 750-lb. bomb nose fuzes. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Grand Machining Co., Detroit, Mich. \$1,014,000. 81mm mortar fin assemblies. Vero Beach, Fla. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Page Aircraft Maintenance, Inc., Lawton, Okla. \$15,700,000. Aircraft maintenance for rotary and fixed wing aircraft at Fort Rucker, Ala., and Fort Stewart, Ga., from Oct. 1, 1967 through June 30, 1968. Purchasing and Contracting Office, Fort Rucker, Ala.
- Sylvania Electric Products, Williamsville, N.Y. \$2,788,718. Light observation helicopter avionics packages. Electronics Command, Fort Monmouth, N.J.
- P. R. Mallory Co., Terrytown, N.Y. \$2,521,079. Dry batteries for night vision site weapons. Lexington, N.C. Electronics Command, Philadelphia, Pa.
- Hupp Corp., Canton, Ohio. \$1,737,791. 20 horsepower industrial engines. Mobility Equipment Command, St. Louis, Mo.
- 29—Uniroyal, Inc., New York, N.Y. \$74,455,016. Various explosives, 105mm projectiles, and maintenance and support services. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Olin Mathieson Chemical Corp., East Alton, Ill. \$67,340,517. Miscellaneous propellant charges; bag loading; and maintenance and support services. Charles-town, Ind. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Day & Zimmerman, Philadelphia, Pa. \$62,370,874. Loading, assembling and packing miscellaneous medium caliber items and components. Texarkana, Tex. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Kisco Co., St. Louis, Mo. \$10,650,000. 105mm cartridge cases. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Olin Mathieson Chemical Corp., East Alton, Ill. \$6,126,458. Ball powder, nitric acid, and maintenance and support services. Baraboo, Wis. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Kennedy Van Saun Corp., Danville, Pa. \$4,628,200. Metal parts for 105mm projectiles. Ammunition Procurement & Supply Agency, Joliet, Ill.
- Canadian Commercial Corp., Ottawa, Canada. \$3,174,875. 105mm cartridge cases.

Quebec City, Canada. Ammunition Procurement & Supply Agency, Joliet, Ill.

—FMC Corp., New York, N.Y. \$2,979,249. Production of a classified agent; and maintenance and support services. Newport. Ind. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Ravenna Arsenal, Inc., Akron, Ohio. \$2-363,390. Maintenance and support services at the Ammunition Plant, Ravenna, Ohio. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Gibbs Mfg. & Research Corp., Janesville, Wis. \$1,638,000. Metal parts for 2.75-inch rocket fuzes. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Stewart-Warner Corp., Indianapolis, Ind. \$1,618,617. Metal parts for 750-lb. bomb nose fuzes. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Honeywell, Inc., Hopkins, Minn. \$1,558-678. Metal parts for fuzes for 40mm cartridges. New Brighton, Minn. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Medico Industries, Wilkes-Barre, Pa. \$1-404,000. 2.75-inch rocket warheads. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Buchmann Spark Wheel Corp., Long Island, City, N.Y. \$1,293,290. Cartridge container extension for the 4.2-inch cartridge. Commack, N.Y. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Nash-Hammond, Inc., City of Industry, Calif. \$1,222,787. Plastic canisters for the Tactical Fighter Dispensing Munitions Program. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Bulova Watch Co., Jackson Heights, N.Y. \$1,026,000. Metal parts for fuzes for 81mm cartridges. Valley Stream, N.Y. Ammunition Procurement & Supply Agency, Joliet, Ill.

—Western Electric, New York, N.Y. \$6,918-054. FY 1968 Nike Hercules and Improved Nike Hercules engineering services. Burlington, N.C., Santa Monica, Calif. and Syracuse, N.Y. Army Missile Command, Huntsville, Ala.

—Philco-Ford, Newport Beach, Calif. \$4-024,297. Incorporation of major improvements into the Chaparral Air Defense Guided Missile System. Army Missile Command, Huntsville, Ala.

—Martin-Marietta, Orlando, Fla. \$3,668,268. Power Station for the Pershing missile system. \$1,684,686. Installation of modification kits in support of the Pershing weapons system. Army Missile Command, Huntsville, Ala.

—Philco-Ford Corp., Newport Beach, Calif. \$1,500,000. Extension of engineering services on the Shillelagh missile system. Army Missile Command, Huntsville, Ala.

—Western Electric, New York, N.Y. \$43-425,000. Additional effort on the Nike-X Research & Development Program. Syracuse, N.Y.; Whippany, N.J.; Bedford, Mass.; Orlando, Fla. and Burlington, N.C. Nike-X Project Office, Redstone Arsenal, Huntsville, Ala.

—Mine Safety Appliance Co., Pittsburgh, Pa. \$8,046,417. Field protective masks. Esmond, R.I. Edgewood Arsenal, Md.

—Boeing Co., Morton, Pa. \$6,000,000. CH-47 Chinook Helicopters, and engineering and procurement data. Aviation Materiel Command, St. Louis, Mo.

—AYCO Corp., Stratford, Conn. \$5,990,976. T53-L-13 engines for UH-1 Iroquois helicopters. Aviation Materiel Command, St. Louis, Mo.

—Raytheon Co., Norwood, Mass. \$4,902,000. Communications equipment. North Dighton, Mass. Electronics Command, Philadelphia, Pa.

—General Electric, Springfield, Mass. \$4-772,982. Production of the M-73E1 machine gun. Army Weapons Command, Rock Island, Ill.

—Litton Systems, Van Nuys, Calif. \$3,217-000. Scientific and technical effort to support the combat development command experimentation during FY 1968. Fort Ord, Calif. Northwest Procurement Agency, Oakland, Calif.

—Electro-Optical Systems, Pasadena, Calif. \$1,500,000. Work on the Night Vision Program. Pomona, Calif. Electronics Command, Fort Monmouth, N.J.

—General Motors, Kokomo, Ind. \$1,007,190. Radio transmitters and receivers. Electronics Command, Philadelphia, Pa.

—Lockheed Aircraft, Metuchen, N.J. \$1,005-063. Work required to prove the performance relative to the facility and onsite acceptance testing program for Stage I and II of the Integrated Wide Band Communication System now being installed in Southeast Asia. Procurement Div., Fort Huachuca, Ariz.



DEPARTMENT OF THE NAVY

- 1—American Mfg. Co. of Tex., Fort Worth, Tex. \$19,320,000. 500-lb. bomb bodies. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- United Aircraft, Norwalk, Conn. \$1,537-797. Spare parts for test sets used to check AN/APQ88/92/103/112 systems on A-6A aircraft. Aviation Supply Office, Philadelphia, Pa.
- 5—Sperry Rand Corp., Bristol, Tenn. \$7,082-444. Wing, fin, and guidance and control sections for Shrike missiles. Naval Air Systems Command.
- Johns Hopkins University, Silver Spring, Md. \$3,482,620. Research and development on the Talos missile. Naval Ordnance Systems Command.
- Texas Instruments, Inc., Dallas, Tex. \$13-828,129. Wing, fins, and guidance and control sections for Shrike missiles. Naval Air Systems Command.
- Willamette Iron & Steel Co., Portland Ore. \$1,223,585. Regular overhaul of the landing ship, dock USS Point Defiance (LSD-31). Supervisor of Shipbuilding, Thirteenth Naval Dist., Seattle, Wash.
- 6—Automatic Sprinkler Co., Carrollton, Tex. \$15,217,169. Fin assemblies for MK 82 bombs. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- 7—Sanders Associates, Nashua, N.H. \$2,669-437. Continued basic engineering and development of an air droppable ASW sonobuoy system. Naval Air Systems Command.
- Consolidated Diesel Electric Co., Old Greenwich, Conn. \$2,054,250. 75 aircraft refueling tank-trucks. Midwest Div., Naval Facilities Engineering Command, Great Lakes, Ill.
- Dynell Electronics Corp., Plainview, N.Y. \$2,635,320. Production of radar sets for the Navy and for Australia. Naval Ordnance Systems Command.
- RCA, Princeton, N.J. \$2,000,000. Six navigation satellites. Special Projects Office.
- 8—Bath Iron Works Corp., Bath, Maine. \$38-451,960. Repair and modernization of six guided missile frigates. Naval Ship Systems Command.
- Grumman Aircraft Engineering Corp., Bethpage, N.Y. \$10,265,000. Research and development on the EA-6B aircraft. Naval Air Systems Command.
- Sperry Rand Corp., Long Island City, N.Y. \$4,200,000. Production of computers to be installed in the subsystem of gunfire control systems. Naval Ordnance Systems Command.
- United Aircraft, Stratford, Conn. \$1,000-000. Increase of long lead time effort for HH-3E helicopters for the Air Force. Naval Air Systems Command.
- 11—McDonnell Douglas Co., St. Louis, Mo. \$43,300,000. Long lead time effort in support of procurement of F-4E and F-4D aircraft. Naval Air Systems Command.
- Sperry Rand Corp., Great Neck, N.Y. \$1-144,000. Engineering effort to perform a research and development program on Talos guided missile fire control systems. Naval Ordnance Systems Command.
- 12—General Precision, Inc., Riverdale, Md. \$5-071,346. Training devices for P-3C prototype aircraft. Naval Training Device Center, Orlando, Fla.

- RCA, Princeton, N.J. \$4,328,370. Six Navy navigation satellites. Special Projects Office.
- North American Aviation, Anaheim, Calif. \$2,121,000. Modification and fabrication of ships inertial navigation system equipment. Naval Ship Systems Command.
- Control Data Corp., Minneapolis, Minn. \$1,800,000. Increase in the capacity of the basic control data 6400 computer systems at the Fleet Numerical Weather Facility, Monterey, Calif. Arden Hills, Minn. Naval Postgraduate School, Monterey, Calif.
- 13—Lockheed Aircraft, Burbank, Calif. \$25-900,000. Configuration change in P-3B aircraft and for associated engineering, planning and tooling. Naval Air Systems Command.
- United Aircraft, East Hartford, Conn. \$3-089,303. Partial conversion of a cost plus incentive fee letter contract for Phase II development of TF-30-P-12 engines. Naval Air Systems Command.
- Magnavox Co., Fort Wayne, Ind. \$1,105-879. Basic engineering and development of an air droppable sonobuoy system. Naval Air Systems Command.
- Lockheed Aircraft, Burbank, Calif. \$1-000,000. Avionics equipment for P-3B aircraft. Naval Air Systems Command.
- American Mfg. Co. of Tex., Fort Worth, Tex. \$10,807,420. 38 caliber projectiles. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- Curtis-Wright Corp., Wood-Ridge, N.J. \$1,024,605. Kits in support of aircraft engines. Aviation Supply Office, Philadelphia, Pa.
- 14—Grumman Aircraft Engineering Corp., Bethpage, N.Y. \$54,476,590. A-6A aircraft. Naval Air Systems Command.
- Westinghouse Electric, Pittsburgh, Pa. \$17,178,800. Designing and furnishing nuclear propulsion components. Naval Ship Systems Command.
- Conco Engineering Works, Mendota, Ill. \$1,479,000. MK 77, MOD 2, 500-lb. bombs. Naval Ordnance Systems Command.
- L. B. Priester & Son, Meridian, Miss. \$1-146,060. Construction of a BOQ addition at the Naval Auxiliary Air Station, Meridian, Miss. Southeast Div., Naval Facilities Engineering Command.
- Canadian Commercial, Ottawa, Canada. \$2,000,000. Structural components for the attack aircraft carrier USS MIDWAY (CVA-41). Montreal, Canada. Navy Supply Center, Oakland, Calif.
- 15—R. G. Webb, Inc., Riverside, Calif. \$2,870,000. Construction of housing units at the Long Beach, Calif., Naval Station. Southwest Div., Naval Facilities Engineering Command, San Diego, Calif.
- 19—Norris Industries, Los Angeles, Calif. \$26-548,622. MK 82 bomb bodies. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- Grumman Aircraft Engineering Corp., Bethpage, N.Y. \$20,800,000. A6A aircraft. Naval Air Systems Command.
- North American Aviation, Anaheim, Calif. \$9,300,000. AN/ASB-12 bomb navigation systems for RA-5C aircraft. Naval Supply Systems Command.
- North American Aviation, McGregor, Tex. \$1,476,600. Increase limitation of authorization for Shrike missiles. Naval Air Systems Command.
- General Dynamics, Pomona, Calif. \$5,946-000. Standard Arm Missile procurement. Naval Air Systems Command.
- 20—FMC Corp., San Jose, Calif. \$1,419,326. Roadwheel assemblies and roadwheel caps for Landing Vehicles. Marine Corps.
- 21—United Aircraft, East Hartford, Conn. \$356,867,401. Modification to an existing contract of \$335,900,280 for TF30-P-12 and TF30-P-3 engines for the Navy and Air Force. Naval Air Systems Command.
- United Aircraft, Stratford, Conn. \$2,373-784. S-61-R helicopters for the Air Force. Naval Air Systems Command.
- General Dynamics, San Diego, Calif. \$1-218,000. Testing and equipping of two newly developed prototype ocean data buoys to be used for a major new scientific program designed to collect oceanographic and meteorological data in the North Pacific. Office of Naval Research.
- 22—General Electric, Washington, D.C. \$5-057,031. Support services for Polaris fire control and support equipment. Pittsfield, Mass. Special Projects Office.



DEPARTMENT OF THE AIR FORCE

- International Telephone & Telegraph Corp., Nutley, N.J. \$1,799,879. Omega navigation sets, including repair parts, training, engineering services and data support. Naval Ship Systems Command.
- Hazeltime Corp., Little Neck, N.Y. \$1,452,281. Detection/transmitting sets. Naval Air Systems Command.
- LTV Aerospace Corp., Dallas, Tex. \$6,000,000. Increase the limitation of authorization for long lead time effort for A-7D aircraft for the Air Force. Naval Air Systems Command.
- 25—Defoe Shipbuilding Co., Bay City, Mich. \$1,818,739. Design and construction of two medium surveying ships. Naval Ship Systems Command.
- Bendix Corp., Mishawaka, Ind. \$15,067,021. FY 1968 funding for production of guidance, control and airframe units for the Talos missile. Naval Ordnance Systems Command.
- Lockheed Missiles & Space Co., Sunnyvale, Calif. \$7,060,364. Development effort related to the Poseidon missile system. Special Projects Office.
- General Dynamics, Pomona, Calif. \$8,000,000. Increase to the limitation of authorization for Standard Army missiles. Naval Air Systems Command.
- Varo, Inc., Garland, Tex. \$2,086,346. Guided missile launchers. Naval Air Systems Command.
- Hughes Aircraft, Culver City, Calif. \$2,000,000. Installation funding for Phoenix missile system. Naval Air Systems Command.
- Royal Industries, Santa Ana, Calif. \$1,619,535. 600-gallon external auxiliary fuel tanks. Naval Air Systems Command.
- International Telephone & Telegraph Corp., Fort Wayne, Ind. \$1,835,280. MK 3 MOD 0 electronic assemblies for the Shrike missile fuzing system. Naval Air Systems Command.
- 26—Norris Industries, Los Angeles, Calif. \$9,590,392. 250-lb. bomb bodies. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- North American Aviation, Columbus, Ohio. \$5,990,260. OV-10A aircraft for the Marine Corps. Naval Air Systems Command.
- 27—U.S. Steel, Pittsburgh, Pa. \$3,468,240. 250-lb. bomb bodies. McKeesport, Pa. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- Lockheed Missiles & Space Co., Sunnyvale, Calif. \$2,300,000. Long lead materials for the Polaris missile system. Special Projects Office.
- Akwa-Downey Construction Co., Milwaukee, Wis. \$2,269,967. Construction of bachelor officer's quarters and a mess addition at the Naval Training Center, San Diego, Calif. Southwest Div., Naval Facilities Engineering Command, San Diego, Calif.
- Westinghouse Electric, Baltimore, Md. \$1,448,700. APD-7 side-looking radar systems for installation in RA-5C aircraft. Aviation Supply Office, Philadelphia, Pa.
- Bethlehem Steel, Terminal Island, Calif. \$1,362,859. Regular overhaul of the landing ship, dock USS Cabildo (LSD-16). Supervisor of Shipbuilding, Eleventh Naval Dist., Long Beach, Calif.
- 28—Polaron Products, New Rochelle, N.Y. \$10,518,974. Conical fin assemblies for 500-lb bombs. Scranton, Pa. Naval Ships Parts Control Center, Mechanicsburg, Pa.
- Lasko Metal Products, West Chester, Pa. \$8,993,195. MK 14 MOD 1 retard fin assemblies for 250-lb. bombs. Hughestown, Pa. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- Dell Industries, Waycross, Ga. \$4,854,039. Conical fin assemblies for 500-lb. bombs. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- Straightline Mfg. Co., Cornwells Heights, Pa. \$3,454,434. Conical fin assemblies for MK 81, 250-lb. bombs. Navy Ships Parts Control Center, Mechanicsburg, Pa.
- 29—Raytheon Co., Bedford, Mass. \$2,878,000. Research and development of the Sparrow AIM-7F guided missile. Naval Air Systems Command.
- Northrop Electronics Co., Hawthorne, Calif. \$1,686,087. AN/SRN-12 Omega receivers. Naval Electronics Systems Command.
- Lockheed Missile & Space Co., Sunnyvale, Calif. \$1,550,000. Development improvements for the Agena space vehicle. Space and Missile Systems Organization, (AFSC), Norton AFB, Calif.
- Avco Corp., Wilmington, Mass. \$2,800,000. Design, development, fabrication, testing and evaluation of the Minuteman IIA re-entry vehicle. Space and Missile Systems Organization, (AFSC), Norton AFB, Calif.
- 18—Kaman Corp., Bloomfield, Conn. \$1,799,199. Replacement spare parts for HH-43 helicopters. Warner Robins Air Materiel Area, (AFLC), Robins AFB, Ga.
- Aerofet General, Sacramento, Calif. \$5,000,000. Manufacture of first and second stage engines for the Titan III. Space and Missile Systems Organization, (AFSC), Los Angeles, Calif.
- AVCO Corp., Wilmington, Mass. \$5,000,000. Development and production of missile penetration aids. Space and Missile Systems Organization, (AFSC), Los Angeles, Calif.
- Boeing Co., Seattle, Wash. \$5,000,000. Installation of a UHF antenna system. Minot AFB, N.D. Space and Missile Systems Organization, (AFSC), Los Angeles, Calif.
- Cessna Aircraft, Wichita, Kan. \$4,593,000. Production of T-37 aircraft. Aeronautical Systems Div., (AFSC), Wright-Patterson AFB, Ohio.
- Control Data Corp., Minneapolis, Minn. \$1,750,947. Rental of automatic data processing equipment at Patrick AFB, Fla. Air Force Eastern Test Range, Patrick AFB, Fla.
- Libby Welding Co., Kansas City, Mo. \$1,440,884. Manufacture of generator sets (A/M32A-60). Sacramento Air Materiel Area, (AFLC), McClellan AFB, Calif.
- United Aircraft, East Hartford, Conn. \$6,000,000. Work on propulsion systems for high performance strategic aircraft. Aeronautical Systems Div., (AFSC), Wright-Patterson AFB, Ohio.
- 19—North American Aviation, Canoga Park, Calif. \$1,000,000. Overhaul of propulsion subsystems. Neosho, Mo. Space and Missile Systems Organization, (AFSC), Los Angeles, Calif.
- General Motors, Indianapolis, Ind. \$6,002,770. Aircraft engine development work. Aeronautical Systems Div., (AFSC), Wright-Patterson AFB, Ohio.
- Mitre Corp., Bedford, Mass. \$16,635,000. Research and development for systems engineering and technical direction in the field of command and control systems. Electronic Systems Div., (AFSC), L. G. Hanscom Field, Mass.
- 20—Lear Siegler, Inc., Grand Rapids, Mich. \$1,779,400. Manufacture of airborne computer components. Aeronautical Systems Div., (AFSC), Wright-Patterson AFB, Ohio.
- 21—Airesearch Mfg. Co., Phoenix, Ariz. \$1,750,243. Overhaul services for gas turbine engines. Oklahoma City Air Materiel Area, (AFLC), Tinker AFB, Okla.
- RCA, Burlington, Mass. \$2,798,995. Development of an airborne data automation system. Electronics Systems Div., (AFSC), L. G. Hanscom Field, Mass.
- 22—Emerson Electric Co., St. Louis, Mo. \$2,075,701. Production of automatic test equipment for F-111 aircraft. San Antonio Air Materiel Area, (AFLC), Kelly AFB, Tex.
- AVCO Corp., Wilmington, Mass. \$1,423,000. Work on a re-entry vehicle program. Space and Missile Systems Organization, (AFSC), Norton AFB, Calif.
- 25—Lockheed Missiles & Space Co., Sunnyvale, Calif. \$1,209,328. Agena launch services at Vandenberg AFB, Calif. for period Oct. 1, 1967 through Sept. 30, 1968. Space and Missile Systems Organization, (AFSC), Norton AFB, Calif.
- Lear Siegler, Inc., Oklahoma City, Okla. \$1,200,000. Time compliance technical order updating on C-141 aircraft. Fairfield, Calif. Oklahoma City Air Materiel Area, (AFLC), Tinker AFB, Okla.
- 26—Fairchild Hiller Corp., Farmingdale, N.Y. \$1,329,500. Manufacture of modification kits for F-105 aircraft. Sacramento Air Materiel Area, (AFLC), McClellan AFB, Calif.
- Lockheed Missiles & Space Co., Sunnyvale, Calif. \$1,230,301. Agena launch services at

the Eastern Test Range, Fla. Space & Missile Systems Organization, (AFSC), Norton AFB, Calif.

- 27—Cessna Aircraft Co., Wichita, Kan. \$5,-320,000. Production of additional A-37B aircraft, spare parts and aerospace ground equipment. Aeronautical Systems Div., (AFSC), Wright-Patterson AFB, Ohio.
- Lockheed Aircraft, Jamaica, N.Y. \$7,904,-629. Inspection, repair and maintenance of C-121 aircraft. Sacramento Air Materiel Area, (AFLC), McClellan AFB, Calif.
- Chromalloy Corp., San Antonio, Tex. \$1,-258,854. Repair of J-57 and J-75 engine compressor blades. San Antonio Air Materiel Area, (AFLC), Kelly AFB, Tex.
- 28—Motorola, Scottsdale, Ariz. \$5,556,000. Fuzes and related equipment for aircraft ordnance. Aeronautical Systems Div., (AFSC), Wright-Patterson AFB, Ohio.
- Hamilton Standard, Windsor Locks, Conn. \$3,525,000. Development, procurement and support of astronaut pressure suit systems for the Manned Orbiting Laboratory Systems Program. Manned Orbiting Laboratory Systems Program Office, Los Angeles, Calif.
- Lockheed Aircraft, Sunnyvale, Calif. \$3,-985,000. Engineering services in support of the Agena space vehicle program. Space & Missile Systems Organization, (AFSC), Norton AFB, Calif.
- Sylvania Electric Products, Needham Heights, Mass. \$1,900,250. Preparation of technical publications for the Minuteman Ground Electronic System. Space & Missile Systems Organization, (AFSC), Norton AFB, Calif.
- Fairchild Hiller, Farmingdale, N.Y. \$1,-801,492. Manufacture of fuel system modification kits for F-105 aircraft. Sacramento Air Materiel Area, (AFLC), Kelly AFB, Tex.
- Acme Industries, Jackson, Mich. \$1,010,000. Manufacture of MA-3 air conditioners. Greenville, Ala. San Antonio Air Materiel Area, (AFLC), Kelly AFB, Tex.
- 29—Lockheed Aircraft, Sunnyvale, Calif. \$1,-500,000. Work on a satellite control facility. Air Force Satellite Control Facility, Los Angeles, Calif.
- General Electric, Cincinnati, Ohio. \$6,000,-000. Work on propulsion systems for high performance strategic aircraft. Evendale, Ohio. Aeronautical Systems Div., (AFSC), Wright-Patterson AFB, Ohio.
- Boeing Co., Seattle, Wash. \$2,000,000. Assembly, installation and checkout of Minuteman missiles. Grand Forks AFB, N.D. Space & Missile Systems Organization, (AFSC), Norton AFB, Calif.

OFF-SHORE PROCUREMENT

- 22—Canadian Commercial Corp., Ottawa, Ontario, Canada. \$3,211,950. Metal parts for 4.2-inch high explosive projectiles. Toronto, Canada. Army Ammunition Procurement & Supply Agency, Joliet, Ill.
- United Kingdom Ministry of Defense, Somerset, England. \$16,738,070. Construction of two salvage tugs. Lowestoft, England. Naval Ship Systems Command.

DISCO Gets New Mailing Address

The Defense Industrial Security Clearance Office (DISCO) is now receiving mail directly from the U.S. Post Office instead of through the Defense Construction Supply Center mail facilities.

Effective immediately, all mail forwarded to DISCO should be addressed:
 Defense Industrial Security
 Clearance Office
 P.O. Box 2499
 Columbus, Ohio 43216

Transit Satellite Information To Be Made Available by NSIA

In accordance with the recently announced Presidential approval to release the Navy Navigation Satellite System (Transit) for commercial use, the National Security Industrial Association (NSIA) has been provided the necessary technical information and documentation on the system's ship-board user equipment. (See item, "Navy Releases Navigation Satellite for Commercial Use," page 8, *Defense Industry Bulletin*, October 1967.)

The documents will be reproduced by NSIA and made available, on an equal basis, to any U.S. company that has an interest beginning on Nov. 30, 1967. There will be a charge to cover the cost of reproduction and mailing. The technical information and documentation consists of the following:

- Status of the Navy Navigation Satellite System.
- Present State of Navigation Doppler Measurement from Near Earth Satellites.
- Operation and Maintenance of Radio Navigation Set SRN-9.

- Program Requirements for Two-Minute Integrated Doppler Satellite Navigation Solution.

- Near Earth Satellite Handbook Data.

Requests for the material should be addressed to: National Security Industrial Association, Department T. 1030 Fifteenth St. NW, Washington, D.C. 20005.

A symposium, to present pertinent data on the respective roles of the satellite system, will be held on Nov. 30 in the Departmental Auditorium, Constitution Ave. between 12th and 14th Sts. NW, Washington, D.C. Representatives of the Office of the Chief of Naval Material, the Applied Physics Laboratory of Johns Hopkins University (developer of the satellite system), and companies presently producing Transit receivers will brief attendees.

Registration for the symposium is being handled by: John H. Jorgenson, National Security Industrial Association, 1030 15th St. NW, Washington, D.C. 20005, Phone: (202) 296-2266.

Ad Hoc Group on Concept Formulation Established

The Director of Defense Research and Engineering has established an Ad Hoc Working Group on Concept Formulation. Its purpose is to accumulate facts on specific concept formulation efforts and to recommend guidance for future concept formulations. There are tentative plans for early issuance of interim permissive type guidance, based upon the efforts of the working group.

The group will be in the information gathering and evaluation phase until November 10. Information or suggestions from individuals in the Office of the Secretary of Defense, the Military Departments, or industry regarding specific concept formulations, problems, or recommended guidance will be welcomed. These may be provided to any of the members of the working group, who are listed below:

James W. Grodsky, Chairman
 Office of Director of Defense

Research and Engineering
 Room 3D 1028, The Pentagon
 Phone: (202) OXford 5-0075
 Washington, D.C. 20301

Major George Kourakos
 Office of Chief of Research
 and Development

Department of the Army
 Room 3C 358, The Pentagon
 Phone: (202) OXford 5-4115
 Washington, D.C. 20310

Commander E. D. Sullivan
 Naval Material Command
 Room 1207, Main Navy Building
 Phone: (202) OXford 6-1541
 Washington, D.C. 20360

Colonel Kenneth R. Chapman
 Headquarters, U.S. Air Force
 Room 5C 1080, The Pentagon
 Phone: (202) OXford 5-2656
 Washington, D.C. 20330

OFFICIAL BUSINESS



United Kingdom Joins United States, Canada, Australia in Project Mallard

The United Kingdom has joined with the United States, Australia and Canada in a project to develop and produce a tactical communications system for the field armies of the respective nations and their associated navies and air forces.

The project, known as Mallard, will cost approximately \$126 million for research and development and will require about eight years to complete.

Objective of Project Mallard is to provide secure, fully automatic, switched communications in the battlefield area from Army headquarters down to battalion level. The system will provide facilities for the transmission and reception of voice, telegraph data and facsimile.

In the initial development phase of Project Mallard, competitive system design studies will be carried out by the U.S. and U.K. electronics industries. Supporting efforts are being conducted by U.S., Australian and Canadian industrial concerns. U.K. industry will undertake a share of this work, phasing out their work in with the work being carried out in the other participating countries.

Brigadier General Paul A. Fevereisen, USA, is the U.S. program/project manager for the Mallard Project. Colonel Arthur V. Brandle, MBE, of the British Army Staff, Washington, D.C., is Project Manager for the United Kingdom. Lieutenant Colonel L. G. Moore, OBE, and Lieutenant Colonel D. G. Doughtry, CD, are the program managers for Australia and Canada, respectively.

The Mallard system will use the building-block or modular principle of equipment construction to ensure flexible inter-operation between the field armies of the four countries.

In April, 1967, the United States, Australia and Canada ratified an agreement to proceed with Project Mallard. The United Kingdom deferred participation pending decision on the sharing of costs and work. Agreement having been reached on these matters, the United Kingdom now has become a partner in the project.

AFLC To Test New Contract Logistics Support Concept

The Air Force Logistics Command (AFLC) will begin a unique experiment in logistics support with the introduction of the C-9A aircraft into the Air Force inventory.

For the first time, AFLC will apply the concept of "contract support" with McDonnell Douglas Corp. providing the logistics normally supplied by AFLC when an aircraft becomes operational. Under this concept, actual cost data will be obtained for contractor-furnished logistics.

The eight new planes—bought "off the shelf" and outfitted especially for aeromedical evacuation—will be operated by the Military Airlift Command (MAC) in the continental United States.

All eight aircraft will be based at Scott AFB, Ill., where a logistics support center will be established by McDonnell Douglas. At this center, spare parts normally furnished by AFLC will be provided by the contractor. Depot maintenance will be carried out by the contractor. MAC will perform only routine organizational servicing and certain "remove and replace" operations.